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Steck-Vaughn's *TABE Fundamentals* Program at a Glance ................. 7

**TABE Objective** Multiplication and Division of Whole Numbers

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<td>1</td>
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**TABE Objective** Decimals

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**TABE Objective** Fractions

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**TABE Objective** Integers

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**TABE Objective** Percents

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<td>Percents—Finding the Part</td>
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<td>17</td>
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</table>

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Answer Sheet ............................................................................... inside back cover
To the Learner

Congratulations on your decision to study for the TABE! You are taking an important step in your educational career. This book will help you do your best on the TABE. You'll also find hints and strategies that will help you prepare for test day. Practice these skills—your success lies in your hands.

What Is the TABE?

TABE stands for the Tests of Adult Basic Education. These paper-and-pencil tests, published by McGraw-Hill, measure your progress on basic skills. There are five tests in all: Reading, Mathematics Computation, Applied Mathematics, Language, and Spelling.

Tabe Levels M, D, and A

<table>
<thead>
<tr>
<th>Test</th>
<th>Number of Items</th>
<th>Suggested Working Time (in minutes)</th>
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<tr>
<td>2 Mathematics Computation</td>
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<tr>
<td>4 Language</td>
<td>55</td>
<td>39</td>
</tr>
<tr>
<td>5 Spelling</td>
<td>20</td>
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</tr>
</tbody>
</table>

Test 1 Reading

This test measures basic reading skills. The main concepts covered by this test are word meaning, critical thinking, and understanding basic information.

Many things on this test will look familiar to you. They include documents and forms necessary to your everyday life, such as directions, bank statements, maps, and consumer labels. The test also includes items that measure your ability to find and use information from a dictionary, table of contents, or library computer display. The TABE also tests a learner's understanding of fiction and nonfiction passages.

Test 2 Mathematics Computation

Test 2 covers adding, subtracting, multiplying, and dividing. On the test you must use these skills with whole numbers, fractions, decimals, integers, and percents.

The skills covered in the Mathematics Computation test are the same skills you use daily to balance your checkbook, double a recipe, or fix your car.
**Test 3: Applied Mathematics**

The Applied Mathematics test links mathematical ideas to real-world situations. Many things you do every day require basic math. Making budgets, cooking, and doing your taxes all take math. The test also covers pre-algebra, algebra, and geometry. Adults need to use all of these skills.

Some questions will relate to one theme. For example, auto repairs could be the subject and the question could focus on the repair schedule. You may be told when a car was last repaired and how often it needs to be repaired. You might be asked to predict the next maintenance date.

Many of the items will not require you to use a specific strategy or formula to get the correct answer. Instead this test challenges you to use your own problem-solving strategies to answer the question.

**Language**

The Language test asks you to analyze different types of writing. Examples are business letters, resumes, job reports, and essays. For each task, you have to show you understand good writing skills.

The questions fit adult interests and concerns. Some questions ask you to think about what is wrong in the written material. In other cases, you will correct sentences and paragraphs.

**Spelling**

In everyday life, you need to spell correctly, especially in the workplace. The spelling words on this test are words that many people misspell and words that are commonly used in adult writing.

---

**Test-Taking Tips**

1. Read the directions very carefully. Make sure you read through them word for word. If you are not sure what the question says, ask the person giving the test to explain it to you.
2. Read each question carefully. Make sure you know what it means and what you have to do.
3. Read all of the answers carefully, even if you think you know the answer.
4. Make sure that the reading supports your answer. Don’t answer without checking the reading. Don’t rely only on outside knowledge.
5. Answer all of the questions. If you can’t find the right answer, rule out the answers that you know are wrong. Then try to figure out the right answer. If you still don’t know, make your best guess.
6. If you can’t figure out the answer, put a light mark by the question and come back to it later. Erase your marks before you finish.
7. Don’t change an answer unless you are sure your first answer is wrong. Usually your first idea is the correct answer.
8. If you get nervous, stop for a while. Take a few breaths and relax. Then start working again.
## TABE Objectives

### Reading
- Interpret Graphic Information
- Words in Context
- Recall Information
- Construct Meaning
- Evaluate/Extend Meaning

### Language
- Usage
- Sentence Formation
- Paragraph Development
- Punctuation and Capitalization
- Writing Convention

### Spelling
- Vowel
- Consonant
- Structural Unit

### Mathematics Computation
- Addition of Whole Numbers
- Subtraction of Whole Numbers
- Multiplication of Whole Numbers
- Division of Whole Numbers
- Decimals
- Fractions
- Integers
- Percents
- Orders of Operation

### Applied Mathematics
- Number and Number Operations
- Computation in Context
- Estimation
- Measurement
- Geometry and Spatial Sense
- Data Analysis
- Statistics and Probability
- Patterns, Functions, Algebra
- Problem Solving and Reasoning

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Lesson 1 Multiplication of Whole Numbers—Regrouping

On the TABE you will be asked to multiply two numbers, which may be arranged horizontally rather than vertically. To make multiplying easier, place the greater number above the smaller one, making sure the numbers are lined up by place value.

\[
\begin{array}{c}
135 \\
\times 6
\end{array}
\]

In 135, 5 is in the ones place, 3 is in the tens place, and 1 is in the hundreds place.

Example Multiply. 547 × 15 =

Step 1. Line up the numbers by place value. Multiply each digit of the top number by the digit in the ones place in the bottom number (547 × 5).

\[
\begin{array}{c}
\text{hundreds} \\
\text{tens} \\
\text{ones}
\end{array}
\begin{array}{c}
2 \\
3 \\
\times 5 \\
\times 4 \\
\times 7
\end{array}
\begin{array}{c}
5 \\
4 \\
7 \\
\times 1 \\
\times 5
\end{array}
\begin{array}{c}
2 \\
7 \\
3 \\
5
\end{array}
\]

Step 2. Multiply each digit of the top number by the 1 of the bottom number. Because the 1 is in the tens place, put a 0 in the ones place.

\[
\begin{array}{c}
\text{thousands} \\
\text{hundreds} \\
\text{tens} \\
\text{ones}
\end{array}
\begin{array}{c}
5 \\
4 \\
7 \\
\times 1 \\
\times 5
\end{array}
\begin{array}{c}
2 \\
7 \\
3 \\
5
\end{array}
\]

Step 3. Add to find the answer.

\[
\begin{array}{c}
\text{thousands} \\
\text{hundreds} \\
\text{tens} \\
\text{ones}
\end{array}
\begin{array}{c}
5 \\
4 \\
7 \\
\times 1 \\
\times 5
\end{array}
\begin{array}{c}
1 \\
1 \\
2 \\
7 \\
3 \\
5
\end{array}
\]

\[
547 \times 15 = 8,205
\]

Test Example

Multiply. Circle the answer.

\[
75 \times 37 =
\]

A. 2,675
B. 2,775
C. 2,745
D. 2,645
E. None of these

Hint

When you multiply, each digit of the top number must be multiplied by each digit of the bottom number.
Multiply. Circle the answer.

1. \[ \frac{43}{5} \times \quad A \] 205
   \hspace{1cm} B \] 215
   \hspace{1cm} C \] 315
   \hspace{1cm} D \] 220
   \hspace{1cm} E \] None of these

2. \[ 327 \times 3 = \]
   \hspace{1cm} F \] 981
   \hspace{1cm} G \] 1,161
   \hspace{1cm} H \] 961
   \hspace{1cm} J \] 1,181
   \hspace{1cm} K \] None of these

3. \[ \frac{631}{73} \times \quad A \] 45,963
   \hspace{1cm} B \] 44,063
   \hspace{1cm} C \] 47,263
   \hspace{1cm} D \] 46,063
   \hspace{1cm} E \] None of these

4. \[ 5,331 \times 24 = \]
   \hspace{1cm} F \] 129,744
   \hspace{1cm} G \] 127,944
   \hspace{1cm} H \] 128,744
   \hspace{1cm} J \] 124,944
   \hspace{1cm} K \] None of these

5. \[ \frac{75}{4} \times \quad A \] 300
   \hspace{1cm} B \] 280
   \hspace{1cm} C \] 400
   \hspace{1cm} D \] 305
   \hspace{1cm} E \] None of these

6. \[ 63 \times 54 = \]
   \hspace{1cm} F \] 3,302
   \hspace{1cm} G \] 3,392
   \hspace{1cm} H \] 3,202
   \hspace{1cm} J \] 3,392
   \hspace{1cm} K \] None of these

7. \[ \frac{508}{4} \times \quad A \] 2,302
   \hspace{1cm} B \] 2,072
   \hspace{1cm} C \] 2,002
   \hspace{1cm} D \] 2,032
   \hspace{1cm} E \] None of these

8. \[ 649 \times 500 = \]
   \hspace{1cm} F \] 300,500
   \hspace{1cm} G \] 32,450
   \hspace{1cm} H \] 3,245
   \hspace{1cm} J \] 324,500
   \hspace{1cm} K \] None of these

9. \[ 74 \times 52 = \]
   \hspace{1cm} A \] 3,648
   \hspace{1cm} B \] 3,898
   \hspace{1cm} C \] 3,848
   \hspace{1cm} D \] 3,488
   \hspace{1cm} E \] None of these

10. \[ 762 \times 8 \]
    \hspace{1cm} F \] 6,906
    \hspace{1cm} G \] 6,096
    \hspace{1cm} H \] 5,686
    \hspace{1cm} J \] 5,696
    \hspace{1cm} K \] None of these

Check your answers on page 59.
Lesson 2

Division of Whole Numbers—No Remainder

If you want to divide 756 bushels of apples evenly among 6 delivery trucks, you can use division to figure out how many bushels to place in each truck. Division problems are written in two ways: with a division sign \( 756 \div 6 = \), or with a division bracket \( 6 \div 756 \).

**Example**  Divide. \( 756 \div 6 = \)

**Step 1.** Set up the problem using the division bracket. You must decide how many 6s there are in 7. There is only one 6, so write the 1 above the 7 in the hundreds column. Then multiply \( 1 \times 6 = 6 \). Write the 6 below the 7 and subtract \( 7 - 6 = 1 \). Then bring down the 5.

```
  1
6 | 7 5 6
- 6
  1 5
```

**Step 2.** Multiply \( 2 \times 6 = 12 \). Write the 2 above the 5 in the tens column. Write the 12 below the 15 and subtract. Then bring the 6 down.

```
hundreds tens ones
1 2
6 | 5 6
- 6
  1 5
```

```
hundreds tens ones
1 2 6
6 | 5 6
- 6
  1 5
```

**Step 3.** Multiply \( 6 \times 6 = 36 \). Write the 6 above the 6 in the division bracket. Write 36 below the 36 and subtract. \( 36 - 36 = 0 \). There are no more numbers to bring down.

```
hundreds tens ones
1 2 6
6 | 5 6
- 6
  1 5
```

```
hundreds tens ones
1 2 6
6 | 5 6
- 6
  1 5
```

```
hundreds tens ones
3 6
6 | 6
- 3 6
```

```
hundreds tens ones
3 6
6 | 6
- 3 6
```

756 \( \div 6 \) = 126. Each delivery truck will carry 126 bushels of apples.

**Test Example**

Divide. Circle the answer.

1. A 753
2. B 770
3. C 710
4. D 768
5. E None of these

**TABE Strategy**

Use multiplication to check your answers. Multiply the number you divided by with your answer. For example, check \( 5,376 \div 7 = 768 \):

\[
\begin{array}{c}
1 \\
D \quad 768 \\
\hline
75376 \\
-49 \\
47 \\
-42 \\
56 \\
-56 \\
0 \\
\end{array}
\]
## Practice

**Divide. Circle the answer.**

<p>| | | | | |</p>
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<td>A</td>
<td>58</td>
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<tr>
<td></td>
<td>B</td>
<td>48</td>
<td></td>
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<tr>
<td></td>
<td>C</td>
<td>59</td>
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<td></td>
<td>D</td>
<td>57</td>
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<tr>
<td></td>
<td>E</td>
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<td><strong>2</strong></td>
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<td>$585 \div 5 =$</td>
<td>F</td>
<td>10</td>
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<td></td>
<td>G</td>
<td>18</td>
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<td>H</td>
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<td>$57 \div 19 =$</td>
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<td>B</td>
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<td>$6,552 \div 4 =$</td>
<td>F</td>
<td>1,638</td>
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<td></td>
<td>G</td>
<td>1,613</td>
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<td></td>
<td>H</td>
<td>1,110</td>
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<td>$130 \div 5 =$</td>
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<td></td>
<td>B</td>
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<td>C</td>
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<td>G</td>
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<td>$378 \div 6 =$</td>
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<td>G</td>
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<td>H</td>
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<td>$695 \div 5 =$</td>
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<td>G</td>
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<td>J</td>
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</table>

Check your answers on page 59.
Lesson 3 Division of Whole Numbers—Remainder

When one number doesn’t divide evenly into another, you have an amount left over. The number left over is called a remainder. Use the letter “R” to show a remainder. \(7 \div 3 = 2 \text{ R}1\) says that when you divide 7 by 3, the answer is 2 with a remainder of 1.

**Example** Divide. \(30 \div 4 = \)

**Step 1.** Set up the problem using a division bracket. Because 4 is larger than 3, divide 30 by 4. How many 4s are there in 30? There are 7. Write 7 above the 0. Multiply \(7 \times 4 = 28\). Write 28 under 30, and subtract. \(30 - 28 = 2\).

```
    tens ones
   4 ) 3 0
    2 8
   ----
    2
```

\(30 \div 4 = 7 \text{ R}2\)

**Test Example**

Divide. Circle the answer.

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<tbody>
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<tr>
<td>7</td>
<td>B</td>
<td>6 R1</td>
</tr>
<tr>
<td>C</td>
<td>10 R3</td>
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<td>D</td>
<td>7 R4</td>
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<tr>
<td>E</td>
<td>None of these</td>
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</tbody>
</table>

**Tabe Strategy**

During the test, start with the problems that you are sure you can do. Then try the problems you think you can complete. Finally try the ones you are least sure about.
Practice

Solve. Circle the answer.

1. $65 \div 9 =$
   A. 6 R2
   B. 7 R1
   C. 7 R2
   D. 8
   E. None of these

2. $87 \div 6 =$
   F. 14 R2
   G. 19
   H. 15 R3
   J. 11 R1
   K. None of these

3. $246 \div 7 =$
   A. 40 R6
   B. 36
   C. 35 R1
   D. 30 R6
   E. None of these

4. $14 \overline{589}$
   F. 42 R1
   G. 40 R2
   H. 42
   J. 40 R9
   K. None of these

5. $12 \overline{347}$
   A. 27 R1
   B. 28
   C. 28 R1
   D. 28 R11
   E. None of these

6. $6 \overline{59}$
   F. 19 R5
   G. 8 R3
   H. 9 R5
   J. 10
   K. None of these

7. $60 \div 7 =$
   A. 8 R4
   B. 9 R4
   C. 9
   D. 7
   E. None of these

8. $188 \div 7 =$
   F. 24
   G. 26 R6
   H. 26 R7
   J. 27 R6
   K. None of these

9. $78 \div 5 =$
   A. 17
   B. 15 R3
   C. 14
   D. 11 R3
   E. None of these

10. $8 \overline{413}$
    F. 51 R5
    G. 51 R8
    H. 52
    J. 52 R5
    K. None of these

Check your answers on pages 59–60.
Solve. Circle the answer.

1. \(324 \div 3 = \)
   A. 109  
   B. 101  
   C. 106  
   D. 107  
   E. None of these

2. \(17 \times 94 = \)
   F. 1,698  
   G. 1,578  
   H. 1,598  
   J. 1,597  
   K. None of these

3. \(\overline{5)37} \)
   A. 5 R2  
   B. 7 R2  
   C. 6 R1  
   D. 7 R3  
   E. None of these

4. \(556 \times 2 = \)
   F. 1,202  
   G. 1,012  
   H. 1,112  
   J. 1,002  
   K. None of these

5. \(742 \times 15 = \)
   A. 10,130  
   B. 11,130  
   C. 10,930  
   D. 11,120  
   E. None of these

6. \(13\overline{104} \)
   F. 80  
   G. 13  
   H. 9  
   J. 8  
   K. None of these

7. \(95 \times 65 = \)
   A. 5,875  
   B. 6,155  
   C. 5,175  
   D. 6,175  
   E. None of these

8. \(7,752 \div 3 = \)
   F. 2,580  
   G. 2,584  
   H. 2,210  
   J. 2,517  
   K. None of these

9. \(2\overline{65} \)
   A. 321  
   B. 30 R3  
   C. 310 R2  
   D. 312  
   E. None of these
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<tr>
<td>98 ÷ 4 =</td>
<td>42 × 9,167 =</td>
<td>392 ÷ 7 =</td>
<td>85 ÷ 17 =</td>
<td>909 × 6</td>
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<tr>
<td><strong>F</strong> 24 R2</td>
<td><strong>A</strong> 385,014</td>
<td><strong>F</strong> 54</td>
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<td><strong>H</strong> 65</td>
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<td><strong>H</strong> 5,454</td>
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<td>16</td>
<td>17</td>
<td>18</td>
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<tr>
<td>75 ÷ 4 =</td>
<td>931 × 307 =</td>
<td>71 ÷ 8 =</td>
<td>6)78</td>
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<tr>
<td><strong>A</strong> 11 R1</td>
<td><strong>F</strong> 295,127</td>
<td><strong>A</strong> 8 R7</td>
<td><strong>F</strong> 13</td>
<td></td>
</tr>
<tr>
<td><strong>B</strong> 17</td>
<td><strong>G</strong> 285,817</td>
<td><strong>B</strong> 6</td>
<td><strong>G</strong> 15</td>
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<td><strong>C</strong> 10 R5</td>
<td><strong>H</strong> 34,447</td>
<td><strong>C</strong> 7 R8</td>
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<td><strong>D</strong> 18 R3</td>
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</table>

Check your answers on pages 60–61.
Lesson 4  Addition of Decimals

Did you know that you use decimal numbers every day? If you had $1.75 and found $0.25, you would add decimals to find out how much money you had. The period in $1.75 is called a decimal point. By learning a few simple rules to use with decimals, you will be ready to solve decimal problems on the TABE.

Example  Use rules of addition to add decimals.  $2.33 + 0.74 =$

Step 1. Place one number under the other, lining up the decimal points. Write a decimal point in the answer line so that it lines up with the other decimal points.

\[
\begin{align*}
2.33 \\
+ 0.74 \\
\hline
0.77
\end{align*}
\]

Step 2. Add the numbers just like you were adding whole numbers (numbers without decimals). Regroup just like you do with regular addition.

\[
\begin{align*}
2.33 \\
+ 0.74 \\
\hline
3.07
\end{align*}
\]

Step 3. Add the numbers in the next column to the left. Regroup if necessary.

\[
\begin{align*}
1 \\
2.33 \\
+ 0.74 \\
\hline
3.07
\end{align*}
\]

Step 4. Add the next column. Don’t forget to add the 1 you regrouped.

\[
\begin{align*}
1 \\
2.33 \\
+ 0.74 \\
\hline
3.07
\end{align*}
\]

2.33 + 0.74 = 3.07

Test Example

Add. Circle the answer.

A 6.86 
B 7.4 
C 6.68 
D 6.4 
E None of these 

\[
\begin{align*}
1 & \\
4.60 \\
+ 2.08 \\
\hline
6.68
\end{align*}
\]

Hint

Make sure that the decimal numbers have the same number of digits to the right of the decimal point before you begin adding. Place 0s at the end of the shorter number until each number has the same amount of digits to the right of the decimal point.
Add. Circle the answer.

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<tr>
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</table>

Check your answers on page 61.
Lesson 5 
Subtraction of Decimals

When you left home you had $8.23 in your pocket. You just bought some juice for $1.09. To find out how much money you have left, you would subtract decimal numbers. Decimal subtraction is just like subtraction with whole numbers, except there is a decimal point.

Example Use the rules of subtraction to subtract decimal numbers.

$$8.23 - 1.09 =$$

Step 1. Write the numbers in columns, putting the smaller number under the larger one so that the decimal points are lined up. Write a decimal point in the answer line under the other decimal points.

\[
\begin{array}{c}
8.23 \\
-1.09 \\
\hline
\end{array}
\]

Step 2. Subtract, starting from the right. Borrow and regroup from the next column to the left, just like regular subtraction. 

\[
\begin{array}{c}
13 \\
-9 \\
\hline
4
\end{array}
\]

Step 3. Subtract the next column to the left. Because you took one away from the 2, you now have a 1 instead of a 2, so 1 - 0 = 1. Write the 1 below the line under the 0.

\[
\begin{array}{c}
1.13 \\
-1.09 \\
\hline
14
\end{array}
\]

Step 4. Subtract the next column. 8 - 1 = 7.

\[
\begin{array}{c}
1.13 \\
-1.09 \\
\hline
7.14
\end{array}
\]


Test Example

Subtract. Circle the answer.

1

\[
28 - 0.062 =
\]

A 27.038 
B 27.938 
C 28.062 
D 27.38 
E None of these

Hint

You can add a decimal point and zeros after a whole number without changing the value of the number. 

28 = 28.000

\[
\begin{array}{c}
1 \ B \\
28.000 \\
-0.062 \\
\hline
27.938
\end{array}
\]
Subtract. Circle the answer.

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<tr>
<td>6</td>
<td>9.02</td>
<td>3.62</td>
<td>9.52</td>
<td>8.48</td>
<td>9.56</td>
<td>None of these</td>
</tr>
<tr>
<td></td>
<td>0.54</td>
<td>-</td>
<td>-</td>
<td>-</td>
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</tr>
<tr>
<td>7</td>
<td>6.008</td>
<td>5.706</td>
<td>6.296</td>
<td>6.716</td>
<td>5.716</td>
<td>None of these</td>
</tr>
<tr>
<td></td>
<td>0.292</td>
<td>-</td>
<td>-</td>
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</tr>
<tr>
<td>8</td>
<td>3.51</td>
<td>0.46</td>
<td>0.34</td>
<td>0.23</td>
<td>0.24</td>
<td>None of these</td>
</tr>
<tr>
<td></td>
<td>3.27</td>
<td>-</td>
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<td>-</td>
<td>-</td>
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<tr>
<td>9</td>
<td>52</td>
<td>52.022</td>
<td>51.922</td>
<td>50.412</td>
<td>51.642</td>
<td>None of these</td>
</tr>
<tr>
<td></td>
<td>0.058</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>10</td>
<td>4.532</td>
<td>2.481</td>
<td>2.381</td>
<td>2.371</td>
<td>2.421</td>
<td>None of these</td>
</tr>
<tr>
<td></td>
<td>2.151</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Check your answers on page 61.
Lesson 6  Multiplication of Decimals

Multiplication of decimals is just like multiplication of whole numbers, except that you must be careful to put the decimal point in the correct place in the answers.

Example  Multiply. 0.6 × 3.2 =

Step 1. Multiply 32 × 6.

\[
\begin{array}{c}
3.2 \\
\times 0.6 \\
\hline
192 \\
\end{array}
\]

Step 2. Next multiply by the 0. Then add to find the answer.

\[
\begin{array}{c}
3.2 \\
\times 0.6 \\
\hline
192 \\
+ 000 \\
\hline
192 \\
\end{array}
\]

Step 3. Now you will find out where to put the decimal point in the answer. Count the number of decimal places in the numbers you multiplied.

\[
\begin{array}{c}
3.2 \quad \rightarrow \quad 1 \text{ place} \\
\times 0.6 \quad \rightarrow \quad +1 \text{ place} \\
\hline
2 \text{ places} \\
\end{array}
\]

Step 4. There must be the same amount of decimal places in the answer as there is in the numbers you multiplied. If there aren’t enough decimal places in the answer, write zeros to the left of the answer. In this case, there is no need to add any zeros.

\[
\begin{array}{c}
3.2 \quad \rightarrow \quad 1 \text{ place} \\
\times 0.6 \quad \rightarrow \quad 1 \text{ place} \\
\hline
192 \\
+ 000 \\
\hline
192 \\
\end{array}
\]

0.6 × 3.2 = 1.92

Test Example

Multiply. Circle the answer.

\[
\begin{array}{c}
1 \quad 2.4 \\
\times 1.5 \\
\hline
\end{array}
\]

A  1.0  
B  3.6  
C  3.9  
D  1.1  
E None of these

\[
\begin{array}{c}
1.2 \\
\times 1.5 \\
\hline
120 \\
240 \\
\hline
3.60 \\
\end{array}
\]
Multiply. Circle the answer.

1

\[
\begin{array}{c}
7 \\
\times 0.3
\end{array}
\]

A 4.242
B 2.21
C 11
D 2.1
E None of these

2

\[
\begin{array}{c}
0.8 \\
\times 3.0
\end{array}
\]

F 3.8
G 0.24
H 3.24
J 2.4
K None of these

3

\[
\begin{array}{c}
7.2 \\
\times 1.3
\end{array}
\]

A 8.5
B 3.16
C 2.16
D 9.36
E None of these

4

\[
\begin{array}{c}
3.1 \\
\times 4.2
\end{array}
\]

F 7.3
G 13.02
H 12.02
J 13.62
K None of these

5

\[
\begin{array}{c}
0.7 \\
\times 0.5
\end{array}
\]

A 35
B 0.12
C 1.2
D 0.035
E None of these

6

\[
\begin{array}{c}
5.2 \\
\times 8.0
\end{array}
\]

F 40.6
G 13.2
H 41.6
J 13.62
K None of these

7

\[
\begin{array}{c}
6.8 \\
\times 4.1
\end{array}
\]

A 27.88
B 24.88
C 10.9
D 27.2
E None of these

8

\[
\begin{array}{c}
8 \\
\times 0.3
\end{array}
\]

F 24
G 2.4
H .24
J 0.024
K None of these

9

\[
\begin{array}{c}
5.3 \\
\times 2.1
\end{array}
\]

A 10.13
B 7.4
C 11.13
D 11.103
E None of these

10

\[
\begin{array}{c}
6.3 \\
\times 1.2
\end{array}
\]

F 7.65
G 5.1
H 16.30
J 1.86
K None of these

Check your answers on page 61.
Lesson 7  Division of Decimals

You multiply and divide decimals to find out your gas mileage, total cost in dollars and cents, or the monthly payments on your charge cards. Dividing decimals is similar to division with whole numbers, but you must remember to put the decimal point in the right place. On the TABE you will be asked to divide decimal numbers.

Example  Divide. $728 \div 0.14 =$

Step 1. Move the decimal point in the number 0.14 to the right two places. 0.14 becomes 14. Now move the decimal point in 728 two places to the right. 728 becomes 72800.

\[0.14 \rightarrow 7.2800.\]

Step 2. Now that the decimals are moved, divide like you do with whole numbers. Divide 14 into 72. How many 14s are there in 72? There are 5. Place the 5 above the 2. Multiply $5 \times 14 = 70$. Write 70 below the 72 and subtract. $72 - 70 = 2$. Then bring down the 8.

\[\begin{array}{c}
5 \\
\hline \\
14 \left| 72800 \right. \\
\hline \\
70 \\
\hline \\
28 \\
\hline \\
28 \\
\hline \\
0 \\
\end{array}\]

Step 3. 14 divides into 28 two times. Write 2 above the 8. Multiply $2 \times 14 = 28$. Write 28 below the 28, and subtract. $28 - 28 = 0$.

\[\begin{array}{c}
52 \\
\hline \\
14 \left| 72800 \right. \\
\hline \\
70 \\
\hline \\
28 \\
\hline \\
28 \\
\hline \\
0 \\
\end{array}\]

Step 4. Because 14 goes into 0 zero times and there are only 0s left to divide, you can bring down the other zeros. Write a zero above each 0 in the bracket. Put the decimal point in the answer directly above the decimal point in the bracket.

\[\begin{array}{c}
5200. \\
\hline \\
14 \left| 72800 \right. \\
\hline \\
70 \\
\hline \\
28 \\
\hline \\
28 \\
\hline \\
0 \\
\hline \\
0 \\
\end{array}\]

$728 \div 0.14 = 5200$

Test Example

Divide. Circle the answer.

\[1 \div 0.43 = \]

\begin{align*}
A & : 130 \\
B & : 1300 \\
C & : 1.3 \\
D & : 13 \\
E & : None of these
\end{align*}
Divide. Circle the answer.

| 1 | A 0.5      | 6 | F 0.0183    |
|   | B 5.5      |   | G 1.83      |
|   | C 55       |   | H 0.00183   |
|   | D 0.55     |   | J 1.183     |
|   | E None of these | | K None of these |

| 2 | F 0.12     | 7 | A 210       |
|   | G 0.012    |   | B 2,100     |
|   | H 12       |   | C 2.1       |
|   | J 1,200    |   | D 21        |
|   | K None of these | | E None of these |

| 3 | A 1.9875   | 8 | F 0.082     |
|   | B 19.875   |   | G 0.289     |
|   | C 0.19875  |   | H 0.028     |
|   | D 0.19857  |   | J 2.80      |
|   | E None of these | | K None of these |

| 4 | F 1.208    | 9 | A 0.242     |
|   | G 0.1208   |   | B 24.2      |
|   | H 12.808   |   | C 242       |
|   | J 0.0128   |   | D 0.0242    |
|   | K None of these | | E None of these |

| 5 | A 3,000    | 10| F 1,500     |
|   | B 3.303    |   | G 1.05      |
|   | C 0.033    |   | H 15        |
|   | D 30       |   | J 0.015     |
|   | E None of these | | K None of these |

Check your answers on pages 61–62.
Solve. Circle the correct answer.

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>A</td>
<td>5.9</td>
<td>5</td>
<td>A</td>
</tr>
<tr>
<td></td>
<td>B</td>
<td>0.59</td>
<td></td>
<td>B</td>
</tr>
<tr>
<td></td>
<td>C</td>
<td>5.72</td>
<td></td>
<td>C</td>
</tr>
<tr>
<td></td>
<td>D</td>
<td>5.27</td>
<td></td>
<td>D</td>
</tr>
<tr>
<td></td>
<td>E</td>
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<td></td>
<td>E</td>
</tr>
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<td>2</td>
<td>F</td>
<td>84</td>
<td>6</td>
<td>F</td>
</tr>
<tr>
<td></td>
<td>G</td>
<td>8.4</td>
<td></td>
<td>G</td>
</tr>
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<td></td>
<td>H</td>
<td>8,400</td>
<td>20</td>
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</tr>
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<td>J</td>
</tr>
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<td>K</td>
</tr>
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</tr>
<tr>
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<td>B</td>
<td>56.061</td>
<td></td>
<td>B</td>
</tr>
<tr>
<td></td>
<td>C</td>
<td>56.61</td>
<td>5</td>
<td>C</td>
</tr>
<tr>
<td></td>
<td>D</td>
<td>56.961</td>
<td>5.74</td>
<td>D</td>
</tr>
<tr>
<td></td>
<td>E</td>
<td>None of these</td>
<td>5.36</td>
<td>E</td>
</tr>
<tr>
<td>4</td>
<td>F</td>
<td>6.98</td>
<td>9</td>
<td>F</td>
</tr>
<tr>
<td></td>
<td>G</td>
<td>15.35</td>
<td>9.751</td>
<td>G</td>
</tr>
<tr>
<td></td>
<td>H</td>
<td>6.99</td>
<td>+ 0.592</td>
<td>H</td>
</tr>
<tr>
<td></td>
<td>J</td>
<td>7.43</td>
<td></td>
<td>J</td>
</tr>
<tr>
<td></td>
<td>K</td>
<td>None of these</td>
<td></td>
<td>K</td>
</tr>
</tbody>
</table>
9

\[
\begin{array}{c}
\text{9} \\
\text{72} \div 9.36 \\
\text{A 13} \\
\text{B 0.013} \\
\text{C 1.3} \\
\text{D 0.13} \\
\text{E None of these}
\end{array}
\]

10

\[
\begin{array}{c}
\text{10} \\
7.6 \times 4 \\
\text{F 0.304} \\
\text{G 30.4} \\
\text{H 0.0304} \\
\text{J 3.04} \\
\text{K None of these}
\end{array}
\]

11

\[
\begin{array}{c}
\text{11} \\
5.000 \quad - 0.450 \\
\text{A 5.450} \\
\text{B 4.550} \\
\text{C 5.540} \\
\text{D 4.440} \\
\text{E None of these}
\end{array}
\]

12

\[
\begin{array}{c}
\text{12} \\
0.64 \overline{248} \\
\text{F 38.75} \\
\text{G 3.875} \\
\text{H 387.5} \\
\text{J 0.3875} \\
\text{K None of these}
\end{array}
\]

13

\[
\begin{array}{c}
\text{13} \\
8.9 \quad + 4.3 \\
\text{A 12.2} \\
\text{B 12.12} \\
\text{C 13.2} \\
\text{D 13.3} \\
\text{E None of these}
\end{array}
\]

14

\[
\begin{array}{c}
\text{14} \\
4.2 \quad \times 8 \\
\text{F 33.6} \\
\text{G 3.36} \\
\text{H 0.326} \\
\text{J 3.136} \\
\text{K None of these}
\end{array}
\]

15

\[
\begin{array}{c}
\text{15} \\
8.701 \quad + 3.041 \\
\text{A 12.12} \\
\text{B 11.472} \\
\text{C 10.472} \\
\text{D 11.742} \\
\text{E None of these}
\end{array}
\]

16

\[
\begin{array}{c}
\text{16} \\
7.1 \quad \times 8.2 \\
\text{F 58.22} \\
\text{G 15.3} \\
\text{H 56.8} \\
\text{J 14.2} \\
\text{K None of these}
\end{array}
\]

17

\[
\begin{array}{c}
\text{17} \\
9 \div 9.54 \\
\text{A 0.16} \\
\text{B 1.106} \\
\text{C 0.0106} \\
\text{D 1.06} \\
\text{E None of these}
\end{array}
\]

18

\[
\begin{array}{c}
\text{18} \\
8.04 \quad - 0.28 \\
\text{F 7.75} \\
\text{G 7.67} \\
\text{H 5.24} \\
\text{J 8.24} \\
\text{K None of these}
\end{array}
\]

Check your answers on pages 62–63.
Lesson 8  Addition of Fractions

Adding fractions can be very helpful if you are trying to name the parts of a whole. You may add fractions when using a ruler, buying cloth, or figuring out the number of hours you worked in a week. Here are the parts of a fraction.

3  numerator
4  fraction bar
7  denominator

On the TABE you’ll see fraction problems in vertical and horizontal form.

<table>
<thead>
<tr>
<th>vertical form</th>
<th>horizontal form</th>
</tr>
</thead>
<tbody>
<tr>
<td>( \frac{6}{10} + \frac{2}{10} = )</td>
<td>( \frac{6}{10} + \frac{2}{10} = )</td>
</tr>
</tbody>
</table>

Example  Add. \( \frac{9}{16} + \frac{7}{16} = \)

Step 1. Write out the problem, placing the numbers side by side. Add a fraction bar after the = sign.

\[ \frac{9}{16} + \frac{7}{16} = \quad \]

Step 2. Look at the denominators. Because both denominators are the same, the answer will have the same denominator. Write 16 under the fraction bar.

\[ \frac{9}{16} + \frac{7}{16} = \frac{16}{16} = \]

Step 3. Add the numerators. \( 9 + 7 = 16 \).

Write 16 above the fraction bar. When the top number and the bottom number are the same, you have 1 whole.

\[ \frac{9}{16} + \frac{7}{16} = \frac{16}{16} = 1 \]

Example  Add. \( \frac{2}{3} + \frac{5}{4} = \)

Step 1. Write out the problem in the vertical form. It is easier to add the whole numbers together and the fractions together.

\[ \begin{array}{c}
\frac{2}{3} \\
+ \frac{5}{4}
\end{array} \]

\[ \frac{2}{3} + \frac{5}{4} = \]

\[ \Rightarrow \frac{2}{3} + \frac{5}{4} = \]

\[ \Rightarrow \]

\[ \Rightarrow \]

\[ \Rightarrow \]
Step 2. When the two fractions have different denominators, change the fractions to equivalent fractions. That means they must have the same denominator before you can begin adding. Fractions that equal the same amount are called equivalent fractions.

For example \( \frac{1}{2} = \frac{2}{4} \).

\[ \frac{3}{4} \times 4 = \frac{12}{4} \]

Step 3. To find the new numerators, multiply by the same numbers. Then add.

\[ \frac{3}{4} \times 4 = \frac{8}{12} \]
\[ + \frac{3}{4} \times 3 = \frac{9}{12} \]
\[ \frac{17}{12} = \frac{8}{12} \]

Step 4. Simplify \( \frac{17}{12} \). To do this, divide 17 by 12: \( 17 \div 12 = 1 \text{ R } 5 \). Since \( \frac{17}{12} = \frac{1}{2} \) and \( \frac{5}{12} \), add 1 to the whole numbers.

\[ \frac{1}{3} \]
\[ + \frac{3}{4} \]
\[ \frac{5}{12} \]

Test Example

Add. Circle the answer.

\[ \frac{7}{12} + \frac{3}{12} = \]

A \( \frac{3}{4} \)
B \( \frac{5}{12} \)
C \( \frac{5}{6} \)
D \( \frac{9}{12} \)
E None of these

Hint

Make sure the fraction is in the lowest terms already before choosing "None of these."
Practice

Add. Circle the answer.

1

\[
\begin{align*}
\text{A} & : \frac{11}{14} \\
\text{B} & : \frac{11}{28} \\
\text{C} & : 1 \frac{1}{14} \\
\text{D} & : \frac{17}{22} \\
\text{E} & : \text{None of these}
\end{align*}
\]

2

\[
\begin{align*}
\text{F} & : \frac{4}{8} \\
\text{G} & : \frac{5}{12} \\
\text{H} & : \frac{2}{4} \\
\text{J} & : 1 \\
\text{K} & : \text{None of these}
\end{align*}
\]

3

\[
\begin{align*}
\text{A} & : 1 \frac{1}{18} \\
\text{B} & : 1 \\
\text{C} & : 1 \frac{4}{25} \\
\text{D} & : \frac{1}{2} \\
\text{E} & : \text{None of these}
\end{align*}
\]

4

\[
\begin{align*}
\text{F} & : \frac{2}{9} \\
\text{G} & : \frac{35}{37} \\
\text{H} & : \frac{2}{3} \\
\text{J} & : \frac{19}{27} \\
\text{K} & : \text{None of these}
\end{align*}
\]

5

\[
\begin{align*}
\text{A} & : \frac{9}{12} \\
\text{B} & : \frac{7}{9} \\
\text{C} & : \frac{1}{2} \\
\text{D} & : \frac{1}{6} \\
\text{E} & : \text{None of these}
\end{align*}
\]

6

\[
\begin{align*}
\text{F} & : 12 \frac{3}{10} \\
\text{G} & : 11 \frac{3}{10} \\
\text{H} & : 11 \frac{1}{3} \\
\text{J} & : 1 \frac{1}{2} \\
\text{K} & : \text{None of these}
\end{align*}
\]

7

\[
\begin{align*}
\text{A} & : 1 \frac{1}{6} \\
\text{B} & : \frac{15}{19} \\
\text{C} & : \frac{7}{9} \\
\text{D} & : \frac{14}{19} \\
\text{E} & : \text{None of these}
\end{align*}
\]

8

\[
\begin{align*}
\text{F} & : 5 \frac{98}{100} \\
\text{G} & : 6 \frac{1}{4} \\
\text{H} & : 5 \frac{1}{4} \\
\text{J} & : 6 \frac{1}{5} \\
\text{K} & : \text{None of these}
\end{align*}
\]

Check your answers on page 63.
Lesson 9  Subtraction of Fractions

If you and your friends started with 2 cakes and ate $\frac{4}{8}$ of one cake, how much cake would you have left? Subtracting fractions will help you solve this problem. You can subtract $\frac{4}{8}$ from 2 to figure out what fraction of the cake is left.

**Example** Subtract. $2 - \frac{4}{8} =$

**Step 1.** Every whole number is a fraction with a denominator of 1, so $2 = \frac{2}{1}$. Write the whole number 2 as an equivalent fraction with the same denominator as the given fraction: 8. To do this, multiply both the numerator and denominator of the whole number by the factor that will give the denominator 8.

\[
\frac{2}{1} \times \frac{8}{8} = \frac{16}{8}
\]

**Step 3.** Subtract the top numbers. $16 - 4 = 12$. Write 12 above the fraction bar. Reduce the fraction by finding a number that can be divided into the numerator and the denominator. Because there are three 4s in 12 and two 4s in 8, reduce the fraction by dividing the numerator and denominator by 4.

\[
\frac{16}{8} - \frac{4}{8} = \frac{12}{8} \div \frac{4}{8} = \frac{3}{2}
\]

\[
2 - \frac{4}{8} = 1 \frac{1}{2}
\]

**Example** Subtract. $6 \frac{3}{4} - 3 \frac{1}{4} =$

**Step 1.** Write out the problem in the vertical form.

\[
\begin{array}{c}
6 \frac{3}{4} \\
- 3 \frac{1}{4}
\end{array}
\]

**Step 2.** The denominator of both numbers is 4, so the denominator of the answer will be 4, too. Now subtract the numerators $3 - 1 = 2$. Then subtract the whole numbers $6 - 3 = 3$.

\[
\begin{array}{c}
6 \frac{3}{4} \\
- 3 \frac{1}{4}
\end{array}
\]

\[
3 \frac{2}{4}
\]
Step 3. Reduce the fraction in the answer. Divide both the numerator and denominator by 2.

\[ \frac{3 \frac{2}{4}}{\frac{2}{2}} = \frac{1}{2} = 3 \frac{1}{2} \]

\[ 6 \frac{3}{4} - 3 \frac{1}{4} = 3 \frac{1}{2} \]

Test Example

Subtract. Circle the answer.

1. \( \frac{7}{9} - \frac{4}{9} = \frac{3}{9} \)

A. \( \frac{4}{6} \)

B. \( \frac{1}{6} \)

C. \( \frac{2}{5} \)

D. \( \frac{1}{3} \)

E. None of these

If you finish the test early, check your answers by reworking every problem.
Subtract. Circle the answer.

1

A  \( \frac{1}{3} \)
B  \( \frac{1}{9} \)
C  \( \frac{2}{3} \)
D  \( \frac{4}{9} \)
E  None of these

5

A  \( \frac{4}{9} \)
B  \( \frac{1}{9} \)
C  \( \frac{1}{3} \)
D  \( \frac{2}{9} \)
E  None of these

2

F  \( 6 \frac{4}{5} \)
G  \( 5 \frac{3}{5} \)
H  \( 6 \frac{2}{5} \)
J  \( 6 \frac{3}{5} \)
K  None of these

6

F  \( \frac{5}{6} \)
G  \( \frac{2}{3} \)
H  \( 5 \frac{1}{3} \)
J  1
K  None of these

3

A  \( \frac{3}{5} \)
B  \( \frac{1}{3} \)
C  \( \frac{3}{10} \)
D  \( \frac{1}{5} \)
E  None of these

7

A  \( \frac{3}{7} \)
B  \( \frac{6}{7} \)
C  \( 5 \frac{5}{7} \)
D  \( 5 \frac{2}{7} \)
E  None of these

4

F  \( 2 \frac{3}{4} \)
G  \( 2 \frac{1}{4} \)
H  \( 3 \frac{1}{4} \)
J  \( 2 \frac{1}{2} \)
K  None of these

8

F  \( 2 \frac{3}{8} \)
G  \( 2 \frac{1}{2} \)
H  \( 2 \frac{1}{4} \)
J  \( 2 \frac{1}{8} \)
K  None of these

Check your answers on page 63.
Lesson 10

Multiplication of Fractions

On the TABE you will be asked to multiply fractions and whole numbers. Multiplying fractions is different than adding or subtracting fractions because you have to multiply both the numerator and the denominator. Both fractions don’t need to have the same denominator when you multiply them.

Example

Multiply. \( \frac{3}{5} \times \frac{7}{1} = \)

**Step 1.** Multiply the numerators. \(3 \times 7 = 21\).
Write 21 above the fraction bar.

\[
\frac{3}{5} \times \frac{7}{1} = \frac{21}{5}
\]

**Step 2.** Now multiply the denominators. \(5 \times 1 = 5\). Write 5 below the fraction bar.

\[
\frac{3}{5} \times \frac{7}{1} = \frac{21}{5}
\]

**Step 3.** Simplify the answer. Because the numerator is larger than the denominator, you can divide the numerator by the denominator to simplify: \(21 \div 5 = 4 \text{ R}1\). The 4 is a whole number. The remainder of 1 becomes the numerator of the new fraction. The denominator stays the same: \(\frac{1}{5}\).

\[
\frac{3}{5} \times \frac{7}{1} = \frac{21}{5} = 4\frac{1}{5}
\]

Test Example

Multiply. Circle the answer.

\[
\frac{3}{4} \times \frac{1}{3} =
\]

A. \(\frac{1}{12}\)
B. \(1\frac{1}{4}\)
C. \(\frac{1}{4}\)
D. \(1\frac{4}{9}\)
E. None of these

\[
\frac{3}{4} \times \frac{1}{3} = \frac{3}{12} = \frac{1}{4}
\]
Multiply. Circle the answer.

1. \( \frac{2}{5} \times \frac{2}{3} = \)
   A. \( \frac{4}{15} \)
   B. \( \frac{4}{10} \)
   C. \( \frac{2}{5} \)
   D. \( \frac{3}{10} \)
   E. None of these

2. \( \frac{5}{9} \times \frac{3}{4} = \)
   F. \( \frac{5}{9} \)
   G. \( \frac{5}{72} \)
   H. \( \frac{8}{9} \)
   J. \( \frac{1}{3} \)
   K. None of these

3. \( \frac{5}{6} \times \frac{1}{2} = \)
   A. \( \frac{5}{6} \)
   B. \( \frac{7}{12} \)
   C. \( \frac{5}{12} \)
   D. \( \frac{1}{3} \)
   E. None of these

4. \( \frac{2}{3} \times \frac{5}{1} = \)
   F. \( \frac{1}{3} \)
   G. \( \frac{2}{15} \)
   H. \( \frac{1}{3} \)
   J. \( \frac{2}{3} \)
   K. None of these

5. \( \frac{3}{8} \times \frac{5}{8} = \)
   A. \( \frac{2}{8} \)
   B. \( \frac{15}{64} \)
   C. \( \frac{24}{40} \)
   D. \( \frac{1}{1} \)
   E. None of these

6. \( \frac{3}{4} \times \frac{2}{9} = \)
   F. \( \frac{4}{12} \)
   G. \( \frac{3}{4} \)
   H. \( \frac{1}{12} \)
   J. \( \frac{3}{4} \)
   K. None of these

7. \( \frac{1}{2} \times \frac{1}{6} = \)
   A. \( \frac{1}{18} \)
   B. \( \frac{3}{12} \)
   C. \( \frac{1}{12} \)
   D. \( \frac{1}{2} \)
   E. None of these

8. \( \frac{4}{5} \times \frac{2}{1} = \)
   F. \( \frac{5}{5} \)
   G. \( \frac{1}{8} \)
   H. \( \frac{3}{5} \)
   J. \( \frac{3}{5} \)
   K. None of these

Check your answers on page 63.
Lesson 11  Division of Fractions

Have you ever needed to divide $1\frac{2}{4}$ casseroles equally among 9 people? You will find that knowing how to multiply fractions will help you divide fractions. For the TABE, you will need to know how to divide fractions by whole numbers and by other fractions.

Example  Divide. $1\frac{2}{4} \div 9 =$

Step 1. Rewrite the whole number 9 as a fraction by putting it over 1: $\frac{9}{1}$. Then write the mixed number as an improper fraction. Multiply the denominator by the whole number and add the numerator. Write out the problem, placing the numbers side by side.

$$1\frac{2}{4} \div 9 = \frac{6}{4} \div \frac{9}{1}$$

Step 3. Multiply the numerators, $6 \times 1 = 6$. Then multiply the denominators, $4 \times 9 = 36$.

$$\frac{6}{4} \div \frac{9}{1} = \frac{6}{4} \times \frac{1}{9} = \frac{6}{36}$$

Step 2. Flip the second fraction, so that the numerator is on the bottom and the denominator is on the top. Next change the division sign to a multiplication sign.

$$\frac{6}{4} \div \frac{9}{1} = \frac{6}{4} \times \frac{1}{9}$$

Step 4. Reduce the fraction by dividing the top and bottom by the same number. Because there are two 3s in 6 and twelve 3s in 36, reduce the fraction by dividing both the numerator and denominator by 3.

$$\frac{6}{36} \div \frac{3}{3} = \frac{2}{12} = \frac{1}{6}$$

$$1\frac{2}{4} \div 9 = \frac{1}{6}$$

Test Example

Divide. Circle the answer.

$$\frac{1}{5} \div \frac{6}{1} =$$

A  $\frac{4}{5}$
B  $\frac{2}{15}$
C  $\frac{5}{15}$
D  $\frac{1}{6}$
E  None of these

$$\frac{4}{5} \div \frac{6}{1} = \frac{4}{5} \times \frac{1}{6} = \frac{4}{30} = \frac{2}{15}$$

1 B
Divide. Circle the answer.

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<tbody>
<tr>
<td>1</td>
<td>$2 \frac{5}{6} \div 4 =$</td>
<td>A</td>
<td>$3 \frac{1}{3}$</td>
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<td></td>
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<td>B</td>
<td>$\frac{1}{5}$</td>
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<td>C</td>
<td>$\frac{17}{24}$</td>
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<td>D</td>
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<td></td>
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<td>B</td>
<td>$33$</td>
<td>B</td>
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<td>C</td>
<td>$2 \frac{1}{3}$</td>
<td>C</td>
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<td></td>
<td></td>
<td>D</td>
<td>$1 \frac{2}{9}$</td>
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<td>F</td>
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<td></td>
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<td>G</td>
<td>$\frac{8}{30}$</td>
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<td></td>
<td></td>
<td>H</td>
<td>$1 \frac{3}{7}$</td>
<td>H</td>
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<td></td>
<td></td>
<td>J</td>
<td>$3 \frac{3}{7}$</td>
<td>J</td>
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<td>K</td>
<td>None of these</td>
<td>K</td>
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</tbody>
</table>

Check your answers on page 63.
Solve. Circle the answer.

1. \[ 8 \frac{4}{9} - 7 \frac{2}{9} \]
   A. 1 \frac{1}{9}
   B. 1 \frac{4}{9}
   C. 1 \frac{2}{9}
   D. 1 \frac{1}{3}
   E. None of these

2. \[ \frac{3}{11} + \frac{7}{11} \]
   F. 1
   G. \frac{7}{9}
   H. \frac{9}{11}
   J. \frac{5}{6}
   K. None of these

3. \[ \frac{2}{9} \div \frac{1}{3} = \]
   A. \frac{2}{3}
   B. \frac{2}{27}
   C. 1 \frac{1}{2}
   D. \frac{2}{9}
   E. None of these

4. \[ \frac{5}{6} \times \frac{2}{3} = \]
   F. 2 \frac{5}{6}
   G. \frac{5}{18}
   H. 3 \frac{1}{2}
   J. \frac{5}{9}
   K. None of these

5. \[ \frac{6}{8} - \frac{1}{4} \]
   A. \frac{1}{4}
   B. \frac{1}{3}
   C. \frac{1}{2}
   D. \frac{3}{8}
   E. None of these

6. \[ \frac{3}{4} \div \frac{5}{6} = \]
   F. 1 \frac{1}{9}
   G. \frac{1}{10}
   H. \frac{5}{8}
   J. 1 \frac{3}{8}
   K. None of these

7. \[ \frac{2}{7} \times \frac{1}{4} = \]
   A. \frac{3}{28}
   B. \frac{1}{7}
   C. \frac{2}{17}
   D. \frac{1}{14}
   E. None of these

8. \[ \frac{55}{100} + \frac{8}{10} = \]
   A. 8 \frac{1}{4}
   G. 7 \frac{85}{100}
   H. 8 \frac{7}{20}
   J. 7 \frac{63}{100}
   K. None of these
9

4

\(-2 \frac{1}{6}\)

A \(\frac{1}{6}\)
B \(1 \frac{2}{3}\)
C \(\frac{5}{6}\)
D \(1 \frac{5}{6}\)
E \text{ None of these}

10

\(\frac{9}{22}\)

\(+ \frac{13}{22}\)

F \(1 \frac{1}{22}\)
G \(\frac{31}{35}\)
H \(1\)
J \(\frac{1}{2}\)
K \text{ None of these}

11

\(3 \frac{3}{5} + 2 =\)

A \(\frac{2}{5}\)
B \(1 \frac{4}{5}\)
C \(1\)
D \(1 \frac{1}{5}\)
E \text{ None of these}

12

\(4 \frac{1}{4}\)

\(+ \frac{2}{5}\)

F \(9 \frac{13}{20}\)
G \(4 \frac{5}{20}\)
H \(1 \frac{9}{10}\)
J \(\frac{3}{10}\)
K \text{ None of these}

13

\(9\)

\(-8 \frac{1}{6}\)

A \(1 \frac{1}{3}\)
B \(\frac{5}{6}\)
C \(\frac{3}{4}\)
D \(1 \frac{1}{2}\)
E \text{ None of these}

14

\(2 \frac{7}{25}\)

\(+ \frac{3}{5}\)

F \(1 \frac{7}{25}\)
G \(3 \frac{4}{5}\)
H \(3 \frac{22}{25}\)
J \(3 \frac{7}{8}\)
K \text{ None of these}

15

\(3 \frac{7}{8} \div \frac{1}{6} =\)

A \(5 \frac{1}{4}\)
B \(23 \frac{1}{4}\)
C \(\frac{5}{8}\)
D \(\frac{1}{6}\)
E \text{ None of these}

16

\(\frac{4}{7}\)

\(-\frac{3}{7}\)

F \(\frac{3}{4}\)
G \(\frac{2}{7}\)
H \(\frac{1}{7}\)
J \(\frac{1}{14}\)
K \text{ None of these}

Check your answers on pages 63–64.
Lesson 12 Addition of Integers

An integer may be a positive number such as 9 or a negative number such as \(-7\). Positive numbers can be written with or without a positive sign (+). For example, \(+9 = 9\). A negative number, however, must always include a negative sign (−) in front of the number. Here are some rules for adding integers.

- When two numbers have the same sign, add those numbers together and give the answer the same sign.
- When the signs of the numbers are different, subtract the lesser number from the greater. The answer has the sign of the greater number.

Example Add. \(-6 + 10 =\)

Step 1. Add \(-6\) and 10 using the rules for adding numbers with different signs. Because the signs are different, subtract the smaller number from the larger number.

\[
\begin{array}{c}
10 \\
-6 \\
\hline
4
\end{array}
\]

\(-6 + 10 = 4\)

Test Example

Add. Circle the answer.

\[
1 + -5 =
\]

A 2
B -2
C -12
D 12
E None of these

\[
7 + -5 = 7 - 5 = 2
\]

TABE Strategy

Check your answer by drawing a number line and counting the spaces moved in the positive or negative direction.
### Practice

Add. Circle the answer.

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<tbody>
<tr>
<td></td>
<td>(8 + 3) =</td>
<td>(-4 + 9) =</td>
<td>(9 + 2) =</td>
<td>(4 + 6) =</td>
<td>(-9 + 13) =</td>
<td>(10 + 7) =</td>
<td>(-8 + 8) =</td>
<td>(3 + 9) =</td>
<td>(-7 + 5) =</td>
<td>(-8 + 7) =</td>
</tr>
<tr>
<td>A</td>
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<td>7</td>
<td>11</td>
<td>-10</td>
<td>10</td>
<td>17</td>
<td>16</td>
<td>6</td>
<td>12</td>
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<td>B</td>
<td>11</td>
<td>13</td>
<td>-7</td>
<td>2</td>
<td>4</td>
<td>-17</td>
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<td>D</td>
<td>-11</td>
<td>5</td>
<td>7</td>
<td>10</td>
<td>-8</td>
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Check your answers on page 64.
Lesson 13  Subtraction of Integers

The opposite of going up 3 steps is going down 3 steps. In both cases the same distance is traveled: 3 steps. Integers include all whole numbers (positive numbers), their opposites (corresponding negative numbers), and 0. Integers that are the same except for sign are opposites. For example, $-3$ is the opposite of $+3$. The absolute value of an integer is its distance from 0. Absolute value is shown like this $|{-3}|$. On the TABE, absolute value expressions include subtraction of integers. Subtracting an integer is the same as adding its opposite.

Example  Subtract. $22 - \ -4 = \ $

Step 1. Choose the rule that matches the signs.

$$|{-9}| + |{+6}|$$

$$9 + 6 = 15$$

$$-9 - 6 = -15$$

Step 2. Add the absolute values.

$$|{+22}| = 22$$

$$|{-4}| = 4$$

$$22 + 4 = 26$$

Step 3. The difference is positive.

$$22 - \ -4 = 26$$

Test Example

Subtract. Circle the answer.

1. $5 - \ -6 =$
   
   A  $-11$
   
   B  $-1$
   
   C  $11$
   
   D  1
   
   E  None of these

   1 C

   $5 - \ -6 = 5 + \ +6 = 11$
Subtract. Circle the answer.

1. $27 - (-5) = \text{A} \ 32$
   \text{B} \ -32$
   \text{C} \ 22$
   \text{D} \ -22$
   \text{E} \ \text{None of these}$

6. $-8 - 13 = \text{F} \ 5$
   \text{G} \ -5$
   \text{H} \ -20$
   \text{J} \ 20$
   \text{K} \ \text{None of these}$

2. $7 - (-8) = \text{F} \ -15$
   \text{G} \ 15$
   \text{H} \ -1$
   \text{J} \ 1$
   \text{K} \ \text{None of these}$

7. $3 - (-10) = \text{A} \ -7$
   \text{B} \ -13$
   \text{C} \ 13$
   \text{D} \ 7$
   \text{E} \ \text{None of these}$

3. $-9 - 16 = \text{A} \ -7$
   \text{B} \ 7$
   \text{C} \ -25$
   \text{D} \ 25$
   \text{E} \ \text{None of these}$

8. $18 - (-4) = \text{F} \ 24$
   \text{G} \ -24$
   \text{H} \ -14$
   \text{J} \ 14$
   \text{K} \ \text{None of these}$

4. $8 - (-5) = \text{F} \ 13$
   \text{G} \ -3$
   \text{H} \ -13$
   \text{J} \ 3$
   \text{K} \ \text{None of these}$

9. $3 - (-7) = \text{A} \ 10$
   \text{B} \ -10$
   \text{C} \ -4$
   \text{D} \ 4$
   \text{E} \ \text{None of these}$

5. $28 - (-3) = \text{A} \ 25$
   \text{B} \ -31$
   \text{C} \ 31$
   \text{D} \ -25$
   \text{E} \ \text{None of these}$

10. $-5 - 15 = \text{F} \ -20$
    \text{G} \ 10$
    \text{H} \ -10$
    \text{J} \ 20$
    \text{K} \ \text{None of these}$

Check your answers on page 64.
Lesson 14  Multiplication of Integers

When you multiply two integers, you follow the same steps as multiplying two whole numbers, but you also have to choose the correct sign. To find the sign, you need to remember two rules.

• If the signs of the two numbers are alike, the answer is positive.
  \[ 6 \times 8 = 48 \quad \text{and} \quad -50 \times -7 = 350 \]

• If the signs of the two numbers are different, the answer is negative.
  \[ 12 \times -4 = -48 \quad \text{and} \quad -9 \times 7 = -63 \]

Example  Multiply. \(-9 \times 4\)

Step 1. Multiply the whole number part of the two integers together.
  \[ 9 \times 4 = 36 \]

Step 2. Determine the sign. Because one number is positive and the other number is negative, the answer is negative.
  \[ -9 \times 4 = -36 \]

Test Example

Multiply. Circle the answer.

1. \(-25 \times -5 = \)  
   A. \(-125\)  
   B. \(120\)  
   C. \(125\)  
   D. None of these

\[ -25 \times -5 = 125 \]

\[ \text{Answer: C} \]
Practice

Multiply. Circle the answer.

1. $6 \times 8 =$
   A. $-48$
   B. $48$
   C. $-42$
   D. $48$
   E. None of these

2. $-4 \times 15 =$
   F. $-60$
   G. $60$
   H. $-90$
   J. $90$
   K. None of these

3. $-12 \times -4 =$
   A. $-36$
   B. $36$
   C. $-54$
   D. $54$
   E. None of these

4. $7 \times -7 =$
   F. $-49$
   G. $-48$
   H. $48$
   J. $49$
   K. None of these

5. $-6 \times 9 =$
   A. $56$
   B. $-56$
   C. $-54$
   D. $54$
   E. None of these

6. $7 \times -8 =$
   F. $54$
   G. $56$
   H. $-54$
   J. $-56$
   K. None of these

7. $-5 \times 8 =$
   A. $35$
   B. $40$
   C. $-35$
   D. $-40$
   E. None of these

8. $-7 \times -4 =$
   F. $-21$
   G. $-28$
   H. $35$
   J. $-42$
   K. None of these

9. $-8 \times -12 =$
   A. $-94$
   B. $94$
   C. $-96$
   D. $96$
   E. None of these

10. $15 \times 15 =$
    F. $-225$
    G. $225$
    H. $-125$
    J. $125$
    K. None of these

Check your answers on pages 64–65.
Lesson 15 Division of Integers

Dividing integers is almost the same as regular division, but you have pay attention to the signs. Here are two rules to remember.

- If the signs are the same, the answer is positive. \(-8 \div -4 = 2\)
- If the signs are different, the answer is negative. \(8 \div -4 = -2\)

Example

Divide. \(-\frac{66}{11}\)

Step 1. Write out the problem using the division bracket. Forget about the negative signs for now.

\[
11 \overline{66}
\]

Step 2. Divide. The answer is \(6\). When both numbers are negative, the answer is positive.

\[
\begin{array}{c|c}
6 \\
11 & 66 \\
-66 \\
\hline
0
\end{array}
\]

\(-\frac{66}{11} = 6\)

Test Example

Divide. Circle the answer.

\[
-54 \div -6 =
\]

A 9
B 8
C -9
D -8
E None of these

1 \[\begin{array}{c|c}
6 & 54 \\
6 & 54 \\
\hline
0
\end{array}\]
Divide. Circle the answer.

1. \(-72 \div -6 = \)  
   A. 10  
   B. 12  
   C. 12  
   D. -10  
   E. None of these

2. \(-96 \div -12 = \)  
   F. -6  
   G. -9  
   H. 9  
   J. 6  
   K. None of these

3. \(96 \div -8 = \)  
   A. 12  
   B. 14  
   C. -12  
   D. -14  
   E. None of these

4. \(80 \div -10 = \)  
   F. 8  
   G. -10  
   H. -8  
   J. 10  
   K. None of these

5. \(-85 \div -17 = \)  
   A. 6  
   B. -6  
   C. 5  
   D. -5  
   E. None of these

6. \(-92 \div 4 = \)  
   F. 20  
   G. -24  
   H. 24  
   J. -20  
   K. None of these

7. \(84 \div -7 = \)  
   A. 10  
   B. -12  
   C. 12  
   D. -10  
   E. None of these

8. \(-72 \div 18 = \)  
   F. -4  
   G. -6  
   H. 4  
   J. 6  
   K. None of these

9. \(-63 \div -3 = \)  
   A. 21  
   B. 22  
   C. -21  
   D. 20  
   E. None of these

10. \(-72 \div 24 = \)  
    F. 3  
    G. -3  
    H. 2  
    J. -2  
    K. None of these

Check your answers on page 65.
1. \(30 - 5 = \)  
   A. 25  
   B. 35  
   C. -25  
   D. 35  
   E. None of these

2. \(-80 \div 5 = \)  
   A. 14  
   B. 14  
   C. 16  
   D. 16  
   E. None of these

3. \(-9 + 4 = \)  
   A. 13  
   B. 5  
   C. -7  
   D. -11  
   E. None of these

4. \(4 - 9 = \)  
   A. 13  
   B. -13  
   C. -5  
   D. 5  
   E. None of these

5. \(-99 \div -11 = \)  
   A. -10  
   B. 11  
   C. 10  
   D. 11  
   E. None of these

6. \(7 + -9 = \)  
   A. 16  
   B. 2  
   C. -2  
   D. 16  
   E. None of these

7. \(-65 \div 5 = \)  
   A. -13  
   B. 12  
   C. -12  
   D. 13  
   E. None of these

8. \(-4 - 18 = \)  
   A. -14  
   B. 22  
   C. 14  
   D. -22  
   E. None of these

9. \(5 \times -6 = \)  
   A. -1  
   B. 1  
   C. -30  
   D. 30  
   E. None of these

10. \(8 \times -4 = \)  
    A. -2  
    B. 32  
    C. -32  
    D. 2  
    E. None of these
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<td><strong>5 + −4 =</strong></td>
<td><strong>26 − −3 =</strong></td>
<td><strong>−76 ÷ 4 =</strong></td>
<td><strong>−6 + 8 =</strong></td>
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<td>A −23</td>
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<td>J 1</td>
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<td>J 18</td>
<td>D 16</td>
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<td>F −8</td>
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<tr>
<td>B 16</td>
<td>G 2</td>
<td>B 4</td>
<td>G −14</td>
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<td>C 4</td>
<td>H 4</td>
<td>C 8</td>
<td>H 8</td>
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<tr>
<td>D 16</td>
<td>J 2</td>
<td>D 14</td>
<td>J 14</td>
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<tr>
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<td>K None of these</td>
<td>E None of these</td>
<td>K None of these</td>
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</table>

Check your answers on page 65.
Lesson 16  Percents—Finding the Part

Being able to use percents can be useful when figuring discounts or sales tax at the store. A percent can be written as a fraction or a decimal. The "%" or percent, means "per (out of) cent (100) parts." If you want to figure out what 80% of 50 is, you can change the problem into a decimal multiplication problem. 80% is the same as \( \frac{80}{100} \) or 0.80, or more simply, 0.8. The word "of" means you are going to multiply.

Example  Multiply. 80% of 50 =

Step 1. Every percent problem has three elements: the whole, the percent, and the part. Find the whole, the percent, and the part.

- The percent is easy to find because it is usually a number followed by a percent sign, "%." In this example, the percent is 80%.
- The whole is the whole amount. The whole represents 100%. The whole usually follows the word of. In this example, the whole is 50.
- The part is part of the whole amount. The part usually follows or comes before the equal sign, or the word is. In this example, the part follows the "=" sign. Because "the part" is unknown, that's what we'll be looking for.

\[ 80\% \text{ (the percent) of } 50 \text{ (the whole) } = \underline{} \text{ (the part)} \]

Step 2. Rewrite the problem, changing the percent to a decimal and the "of" to a multiplication sign.

\[ 0.8 \times 50 = \]

Step 3. Multiply using what you already know about multiplying decimals. Remember to count the number of decimal places in the numbers you are multiplying. Because 8 has one decimal place, begin from the right of the decimal and count one place to the left. 4.0 is "the part."

\[
\begin{array}{c}
0.8 \\
\times \ 50 \\
\hline
40.0
\end{array}
\]

80% of 50 = 40.0

Example  Multiply. 70% of $6.20 =

Step 1. Label the percent, the whole, and the part in the problem.

\[ 70\% \text{ (the percent) of } $6.20 \text{ (the whole) } = \underline{} \text{ (the part)} \]
Step 2. Rewrite the problem. Change the percent to a decimal and the “of” to a multiplication sign. Drop the 0 on the end of $6.20 because it’s just a placeholder. Drop the $ for now.

0.70 of $6.20 is the same as $0.7 \times 6.2$

Step 3. Set up the problem vertically to make multiplication easier. Multiply, using what you already know about multiplying decimals. Because there is one decimal place in 6.2 and one in 0.7, place the decimal point two places from the right of the last number in the answer.

\[
\begin{array}{c}
0.7 \times 6.2 = \\
\times 0.7 \\
\hline
4.34
\end{array}
\]

Rewrite the answer in dollar format just like the problem: $4.34$ is “the part.”

70% of $6.20 = $4.34

Test Example

Multiply. Circle the answer.

1

40% of 61 =

A 244.0
B 24.4
C 0.244
D 2.44
E None of these

\[
\begin{array}{c}
1 \text{ B } 40\% \text{ of } 61 = 0.4 \times 61 = \\
\times 0.4 \\
\hline
24.4
\end{array}
\]
Practice

Read the question. Circle the answer.

1. 50% of $9.00 =
   A. $1.82
   B. $18.20
   C. $4.50
   D. $45.00
   E. None of these

2. 70% of 54 =
   F. 0.378
   G. 3.78
   H. 378.0
   J. 37.8
   K. None of these

3. 40% of 90 =
   A. 36.0
   B. 3.6
   C. 360.0
   D. 0.36
   E. None of these

4. 100% of 76 =
   F. 7.6
   G. 76
   H. 0.76
   J. .760
   K. None of these

5. 80% of $10 =
   A. $80
   B. $0.80
   C. $16.00
   D. $8.00
   E. None of these

6. 20% of 50 =
   F. 100.0
   G. 1.0
   H. 0.10
   J. 10.0
   K. None of these

7. 60% of 100 =
   A. 60
   B. 6
   C. 600
   D. 0.6
   E. None of these

8. 100% of 83 =
   F. 83.0
   G. 830.0
   H. 8.3
   J. 0.83
   K. None of these

9. 90% of 80 =
   A. 810.0
   B. 81.0
   C. 0.81
   D. 8.1
   E. None of these

10. 1% of 72 =
    F. 72
    G. 720
    H. 7.2
    J. 0.72
    K. None of these

Check your answers on pages 65–66.
Lesson 17  Percents—Finding the Whole or Percent

On the TABE you sometimes have to find the “whole” or the “percent” instead of finding the “part”. In problems where you have to find a whole, there will be a □ in the problem.

**Example** Solve. 90% of □ = 36

**Step 1.** Label the percent, the whole, and the part.

\[
90\% \text{ (the percent) of } \square \text{ (the whole)} = \square \text{ (the part)}
\]

In this problem, we know the percent and the part, so we’ll be looking for the whole.

**Step 3.** Division and multiplication are opposite operations, which means division undoes multiplication. Divide both sides by 0.9. The multiplication problem now becomes a division problem.

\[
\square = 36 \div 0.9
\]

**Step 4.** Now rewrite the problem using the division bracket. Divide, using what you already know about dividing decimals. Remember to place the decimal point above the decimal in the division bracket. Because we don’t normally express a whole number with a decimal point, you can drop the decimal point in the answer. 40 is “the whole.”

\[
\begin{align*}
40. & \\
9.360. & \\
-36 & \\
0 &
\end{align*}
\]

90% of □ = 36.

**Example** Solve. What percent of 40 is 56?

**Step 1.** Label the percent, the whole, and the part in the problem.

\[
\begin{align*}
\text{the whole} & \\
\text{What percent of 40 is 56?} & \\
\text{the percent} & \\
\text{the part} &
\end{align*}
\]

In this problem, we know the whole and the part, so we’re looking for the percent.

**Step 2.** Rewrite the problem. Change “of” to a multiplication sign and “is” to an equal sign. Change “what percent” to □ %.

\[
\square \% \times 40 = 56
\]
Step 3. Move the numbers around so that the □ is on one side of the "÷" sign and the numbers are on the other. Change the operation sign to the opposite operation of multiplication, which is division.

□% = 56 ÷ 40

Step 4. Rewrite the problem, using the division bracket. Divide, using what you already know about dividing decimals. Remember to place the decimal point above the decimal in the division bracket.

\[
\begin{array}{c|c}
\text{1.4} & \\
\hline
\text{40} & \text{56.0} \\
\text{40} & \text{160} \\
\text{160} & \text{0}
\end{array}
\]

Step 5. Remember that you're looking for a percent. Because percent means "out of 100," multiply the answer by 100 to get a percent. \(1.4 \times 100 = 140.0\). You can drop the decimal point and the zero after it. Add the "%" sign to the answer. 140 is "the percent."

\[
\begin{array}{c|c}
100 & \\
\times & \text{1.4} \\
400 & \\
+1000 & \\
140.0 & \\
\end{array}
\]

56 is 140% of 40.

Test Example

Solve. Circle the answer.

1

60% of □ = 84

A 710
B 14
C 140
D 71
E None of these

1 C 60% of □ = 84 → .6 × □ = 84 → 84 ÷ .6 = 140

\[
\begin{array}{c|c}
6 & \text{840} \\
\text{6} & \\
\text{24} & \\
\text{24} & \\
\text{00} & \\
\end{array}
\]
Practice

Read the question. Circle the answer.

1. 40% of □ = 32
   A  8.0
   B  80.0
   C  1.28
   D  128.0
   E  None of these

2. What percent of 100 is 70?
   F  7%
   G  70%
   H  14%
   J  10%
   K  None of these

3. 24% of □ = 72
   A  3,400
   B  340
   C  3,000
   D  300
   E  None of these

4. 20% of □ = 54
   F  27
   G  207
   H  370
   J  37
   K  None of these

5. What percent of 90 is 99?
   A  11%
   B  90%
   C  110%
   D  9%
   E  None of these

6. 13% of □ = 91
   F  700
   G  1,400
   H  140
   J  7,000
   K  None of these

7. What percent of 400 is 80?
   A  2%
   B  5%
   C  20%
   D  50%
   E  None of these

8. 70% of □ = 70
   F  70
   G  110
   H  30
   J  7
   K  None of these

Check your answers on page 66.
1. $850
   100% of $8.50 =
   A $8.50
   B $0.85
   C $85.00
   D None of these

2. What percent of 300 is 90?
   A 20%
   B 3%
   C 33%
   D 60%
   E None of these

3. 80% of □ = 56
   A 70.0
   B 448.0
   C 0.7
   D 4.48
   E None of these

4. 50% of 40 =
   A 0.2
   B 2.0
   C 200.0
   D 20.0
   E None of these

5. What percent of 60 is 96?
   A 160%
   B 620%
   C 62%
   D 16%
   E None of these

6. 30% of 28 =
   A 840.0
   B 84.0
   C 0.84
   D None of these

7. 15% of □ = 75
   A 5,000
   B 200
   C 500
   D 2,000
   E None of these

8. 90% of $1.70 =
   A $1.53
   B $15.30
   C $18.80
   D $1.88
   E None of these
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<td>C 760</td>
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<td>10</td>
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<td>H 90.0</td>
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<td>C 760%</td>
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Check your answers on pages 66–67.

Level D

TABE Review: Percents • 55
The Math Computation Assessment is identical to the actual TABE in format and length. It will give you an idea of what the real test is like. Allow yourself 15 minutes to complete this assessment. Check your answers on pages 67–68.

**Sample A**

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<th>(491 \times 4 =)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>1,624</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>1,924</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>1,664</td>
<td></td>
<td></td>
</tr>
<tr>
<td>D</td>
<td>1,946</td>
<td></td>
<td></td>
</tr>
<tr>
<td>E</td>
<td>None of these</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>4</th>
<th>(4)92)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>F</td>
<td>20</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G</td>
<td>23</td>
<td></td>
<td></td>
</tr>
<tr>
<td>H</td>
<td>24</td>
<td></td>
<td></td>
</tr>
<tr>
<td>J</td>
<td>22</td>
<td></td>
<td></td>
</tr>
<tr>
<td>K</td>
<td>None of these</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>5</th>
<th>4.63</th>
<th>(-) 4.19</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>0.56</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>0.43</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>0.44</td>
<td></td>
<td></td>
</tr>
<tr>
<td>D</td>
<td>0.54</td>
<td></td>
<td></td>
</tr>
<tr>
<td>E</td>
<td>None of these</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>6</th>
<th>(6.2) + (2.4)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>F</td>
<td>8.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G</td>
<td>8.06</td>
<td></td>
<td></td>
</tr>
<tr>
<td>H</td>
<td>8.6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>J</td>
<td>0.86</td>
<td></td>
<td></td>
</tr>
<tr>
<td>K</td>
<td>None of these</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
7  
90 ÷ 15 =  
A  5  
B  4  
C  8  
D  10  
E None of these

8  
\[ \frac{563}{70} \]  
F  39,410  
G  35,210  
H  35,410  
J  39,400  
K None of these

9  
33 ÷ 4 =  
A  18 R1  
B  8  
C  9 R3  
D  8 R1  
E None of these

10  
46 × 37 =  
F  1,602  
G  1,662  
H  1,702  
J  1,562  
K None of these

11  
\[ -96 ÷ -16 = \]  
A  -6  
B  6  
C  -10  
D  10  
E None of these

12  
\[ 8.421 + 0.363 \]  
F  12.024  
G  8.894  
H  12.24  
J  8.784  
K None of these

13  
\[ \frac{4}{5} \times \frac{8}{1} = \]  
A  6 \( \frac{2}{5} \)  
B  \( \frac{1}{10} \)  
C  2 \( \frac{2}{5} \)  
D  6 \( \frac{1}{5} \)  
E None of these

14  
20% of $5.40 =  
F  $1.80  
G  $27.00  
H  $2.70  
J  $10.80  
K None of these

15  
40% of □ = 84  
A  21  
B  210  
C  47  
D  470  
E None of these

16  
\[ \frac{7}{8} - \frac{1}{8} = \]  
F  \( \frac{7}{8} \)  
G  \( \frac{3}{4} \)  
H  \( \frac{1}{2} \)  
J  \( \frac{5}{8} \)  
K None of these

17  
50% of 57 =  
A  28.5  
B  2.85  
C  285.0  
D  0.285  
E None of these
18  
\[ \frac{8}{13} + \frac{5}{13} = \]

F  \[ \frac{12}{13} \]
G  \[ \frac{1}{6} \]
H  1
J  \[ \frac{1}{2} \]
K  None of these

19  
\[ 5 \frac{3}{4} + 8 \frac{4}{5} = \]

A  \[ 5 \frac{4}{5} \]
B  \[ 8 \frac{16}{20} \]
C  \[ \frac{31}{20} \]
D  \[ 14 \frac{11}{20} \]
E  None of these

20  
\[ 6 + (-3) = \]

F  9
G  3
H  -9
J  -3
K  None of these

21  
\[ -8 \times -6 = \]

A  -48
B  -54
C  48
D  54
E  None of these

22  
\[ 2.6 \times 3.1 = \]

F  7.106
G  7
H  2.6
J  8.06
K  None of these

23  
What percent of 40 is 96?

A  41%
B  24%
C  140%
D  410%
E  None of these

24  
\[ 0.82 \div 984 = \]

F  1,200.0
G  1.2
H  12.0
J  120.0
K  None of these

25  
\[ -6 - 14 = \]

A  -8
B  -20
C  20
D  8
E  None of these
Lesson 1 Multiplication of Whole Numbers—Regrouping (page 9)

1. B
   \[\begin{array}{c}
   43 \\
   \times 5 \\
   \hline
   215
   \end{array}\]

2. F
   \[\begin{array}{c}
   327 \\
   \times 3 \\
   \hline
   981
   \end{array}\]

3. D
   \[\begin{array}{c}
   231 \\
   \times 73 \\
   \hline
   1893 \\
   + 44170 \\
   \hline
   46063
   \end{array}\]

4. G
   \[\begin{array}{c}
   5331 \\
   \times 24 \\
   \hline
   21324 \\
   + 106620 \\
   \hline
   127944
   \end{array}\]

5. A
   \[\begin{array}{c}
   75 \\
   \times 4 \\
   \hline
   300
   \end{array}\]

6. K
   \[\begin{array}{c}
   63 \\
   \times 54 \\
   \hline
   252 \\
   + 3150 \\
   \hline
   3402
   \end{array}\]

Lesson 2 Division of Whole Numbers—No Remainder (page 11)

1. A
   \[\begin{array}{c}
   41232 \\
   \div 32 \\
   \hline
   20 \\
   \hline
   32 \\
   \hline
   0
   \end{array}\]

2. H
   \[\begin{array}{c}
   585 \\
   \div 17 \\
   \hline
   35 \\
   \hline
   35 \\
   \hline
   0
   \end{array}\]

3. C
   \[\begin{array}{c}
   1957 \\
   \div 3 \\
   \hline
   57 \\
   \hline
   0
   \end{array}\]

Lesson 3 Division of Whole Numbers—Remainder (page 13)

1. C
   \[\begin{array}{c}
   9165 \\
   \div 63 \\
   \hline
   2
   \end{array}\]

2. K
   \[\begin{array}{c}
   6187 \\
   \div 14 \\
   \hline
   3
   \end{array}\]

3. C
   \[\begin{array}{c}
   7246 \\
   \div 35 \\
   \hline
   1
   \end{array}\]


3. B  5\,37\, [Division of Whole Numbers—Remainder]
    \-\,35
    \-\,2
    \-\,1

4. H  556\, [Multiplication of Whole Numbers—Regrouping]
      \times\,2
      \,1,112
      2

5. B  742\, [Multiplication of Whole Numbers—Regrouping]
      \times\,15
      3710
      +\,7420
      11,130

6. J  13,104\, [Division of Whole Numbers—No Remainder]
      \-\,104
      \-\,0
      \-\,0
      8

7. D  95\, [Multiplication of Whole Numbers—Regrouping]
      \times\,65
      1475
      +\,5700
      6,175

8. G  37752\, [Division of Whole Numbers—No Remainder]
      \-\,6
      \-\,17
      \-\,13
      \-\,25
      \-\,24
      \-\,12
      \-\,12
      8

9. E  2,65\, [Division of Whole Numbers—Remainder]
      \-\,6
      \-\,5
      \-\,4
      \-\,1

10. F  24\,R2\, [Division of Whole Numbers—Remainder]
       \-\,8
       \-\,16
       2

11. A  9167\, [Multiplication of Whole Numbers—Regrouping]
       \times\,42
       18,334
       +\,36,6680
       38,5014

12. K  7392\, [Division of Whole Numbers—No Remainder]
       \-\,35
       \-\,42
       \-\,0

13. D  1785\, [Division of Whole Numbers—No Remainder]
       \-\,85
       \-\,0

14. H  909\, [Multiplication of Whole Numbers—Regrouping]
       \times\,6
       5,454

15. D  475\, [Division of Whole Numbers—Remainder]
       \-\,4
       \-\,32
       \-\,3

16. G  931\, [Multiplication of Whole Numbers—Regrouping]
       \times\,307
       16517
       +\,279,300
       285,817

17. A  8,7\, [Division of Whole Numbers—Remainder]
       \-\,64
       \-\,7

---

**TABE Review: Multiplication and Division of Whole Numbers (pages 14–15)**

1. E  3\,324\, [Division of Whole Numbers—No Remainder]
      \-\,3
      \-\,024
      \-\,24
      \-\,0

2. H  94\, [Multiplication of Whole Numbers—Regrouping]
      \times\,17
      658
      +\,940
      1,598

3. B  5\,37\, [Division of Whole Numbers—Remainder]
      \-\,35
      \-\,2
      \-\,1

4. H  556\, [Multiplication of Whole Numbers—Regrouping]
      \times\,2
      \,1,112
      2

5. B  742\, [Multiplication of Whole Numbers—Regrouping]
      \times\,15
      3710
      +\,7420
      11,130

6. J  13,104\, [Division of Whole Numbers—No Remainder]
      \-\,104
      \-\,0
      \-\,0
      8

7. D  95\, [Multiplication of Whole Numbers—Regrouping]
      \times\,65
      1475
      +\,5700
      6,175

8. G  37752\, [Division of Whole Numbers—No Remainder]
      \-\,6
      \-\,17
      \-\,13
      \-\,25
      \-\,24
      \-\,12
      \-\,12
      8

9. E  2,65\, [Division of Whole Numbers—Remainder]
      \-\,6
      \-\,5
      \-\,4
      \-\,1

10. F  24\,R2\, [Division of Whole Numbers—Remainder]
       \-\,8
       \-\,16
       2

11. A  9167\, [Multiplication of Whole Numbers—Regrouping]
       \times\,42
       18,334
       +\,36,6680
       38,5014

12. K  7392\, [Division of Whole Numbers—No Remainder]
       \-\,35
       \-\,42
       \-\,0

13. D  1785\, [Division of Whole Numbers—No Remainder]
       \-\,85
       \-\,0

14. H  909\, [Multiplication of Whole Numbers—Regrouping]
       \times\,6
       5,454

15. D  475\, [Division of Whole Numbers—Remainder]
       \-\,4
       \-\,32
       \-\,3

16. G  931\, [Multiplication of Whole Numbers—Regrouping]
       \times\,307
       16517
       +\,279,300
       285,817

17. A  8,7\, [Division of Whole Numbers—Remainder]
       \-\,64
       \-\,7
Lesson 4 Addition of Decimals (page 17)

1. B
   7.342
   + 2.526
   ______
   9.868

2. K
   7.46
   + 0.23
   ______
   7.69

3. B
   4.35
   + 0.78
   ______
   5.13

4. F
   7.03
   + 4.10
   ______
   11.13

5. E
   237.943
   + 46.085
   ______
   284.028

6. G
   3.75
   + 0.66
   ______
   4.41

7. D
   6.749
   + 4.610
   ______
   11.359

8. H
   9.03
   + 4.20
   ______
   13.23

9. D
   4.1
   + 1.8
   ______
   5.9

10. K
    0.84
    + 2.39
    ______
    3.23

Lesson 5 Subtraction of Decimals (page 19)

1. C
   36.000
   - 0.024
   ______
   35.976

2. F
   6914
   - 7.04
   ______
   68.65

3. C
   600
   - 1.68
   ______
   432

4. F
   6.93
   - 6.48
   ______
   0.45

5. E
   8.43
   - 6.25
   ______
   2.18

6. H
   8912
   - 9.02
   ______
   8.08

7. D
   5910
   - 0.292
   ______
   5.716

8. J
   3.51
   - 3.27
   ______
   0.24

9. E
   52000
   - 0.058
   ______
   51.942

10. G
    4532
    - 2.151
    ______
    2.381

Lesson 6 Multiplication of Decimals (page 21)

1. D
   0.3
   x 7
   ______
   2.1

2. J
   2
   x 3.0
   ______
   0.0
   + 2.40
   ______
   2.40

3. D
   7.2
   x 1.3
   ______
   2.16
   + 7.20
   ______
   9.36

4. G
   3.1
   x 4.2
   ______
   1.62
   + 12.40
   ______
   13.02

5. E
   0.7
   x 0.5
   ______
   35
   + 0.00
   ______
   0.35

6. H
   5.2
   x 8.0
   ______
   0.0
   + 41.60
   ______
   41.60

7. A
   6.8
   x 4.1
   ______
   68
   + 27.20
   ______
   27.88

8. G
   8
   x 0.3
   ______
   2.4

9. C
   5.3
   x 2.1
   ______
   1.53
   + 10.60
   ______
   11.13

10. K
    6.3
    x 1.2
    ______
    1.26
    + 6.30
    ______
    7.56
Lesson 7 Division of Decimals (page 23)

1. E 800.040
   - 40
   0
   1200
2. J 21025200
   - 21
   42
   - 42
   0

0.198785
3. C 163.780000
   - 16
   158
   - 144
   310
   140
   - 128
   110
   - 120
   - 112
   80
   - 80
   0

0.1208
4. G 253.0200
   - 25
   52
   - 50
   200
   - 200
   0

3000
5. A 026788000
   - 78
   0000
   - 000
   0

18300
6. K 00473200
   - 4
   33
   - 32
   12
   - 12
   000
   - 000
   0

2100
7. B 03981900
   - 78
   39
   - 39
   000
   - 000
   0

8. H 607.680
   - 120
   480
   - 480
   0

9. A 1513.630
   - 30
   63
   - 60
   30
   - 30
   0

150
10. K 07411100
    - 74
    370
    - 370
    00
    - 00
    0

TABE Review: Decimals (pages 24–25)

1. A 3.7 [Addition of Decimals]
   + 2.2
   5.9

2. H 0975600
   - 72
   36
   - 36
   0

3. D 57,000 [Subtraction of Decimals]
   - 0.039
   56,961

4. F 6.05 [Addition of Decimals]
   + 0.93
   6.98

5. B 1.1 6.5
   × 3.3
   1.95 [Multiplication of Decimals]
   + 19.50
   21.45

6. K 201.5700 [Division of Decimals]
   - 140
   170
   - 160
   0

7. B 5.74 [Subtraction of Decimals]
   - 5.36
   0.38

   + 0.592
   10.343

9. D 729.36 [Division of Decimals]
   - 7.2
   2.16

10. G 2.6 [Multiplication of Decimals]
    × 4
    30.4

11. B 4910 [Subtraction of Decimals]
    - 5.000
    4.550

12. H 06424800.0 [Division of Decimals]
    - 192
    560
    - 512

Math Computation
13. C  8.9
+ 4.3
---
13.2

14. F  37
+ 4.2
---
41.2

15. D  8.701
+ 3.041
---
11.742

16. F  7.1
× 8.2
---
58.22

17. D  99.54
- 9
---
90.54

18. K  8.04
- 0.28
---
7.76

Lesson 8 Addition of Fractions (page 28)
1. A  3
+ 8
---
11

2. B  3
+ 8
---
11

3. C  11
+ 7
---
18

4. D  8
+ 10
---
18

5. E  2
+ 5
---
7


Lesson 9 Subtraction of Fractions (page 31)
1. D  1
- 5
---
8

2. I  7
- 1
---
6

3. E  4
- 2
---
2

4. G  3
- 2
---
1

5. B  4
- 1
---
3

6. G  3
- 2
---
5

7. C  7
- 2
---
5

8. H  5
- 2
---
3

Lesson 10 Multiplication of Fractions (page 33)
1. A  2
× 3
---
6

2. K  5
× 3
---
15

3. C  5
× 1
---
5

Lesson 11 Division of Fractions (page 35)
1. C  5
÷ 4
---
1

2. H  3
÷ 2
---
3

3. D  3
÷ 3
---
1

4. F  4
÷ 5
---
3

5. E  2
÷ 3
---
3

6. F  2
÷ 1
---
2

Lesson 12 Addition of Decimals (page 40)
1. A  8.9
+ 4.3
---
13.2

2. B  37.1
+ 4.2
---
41.3

3. C  8.701
+ 3.041
---
11.742

4. D  7.1
× 8.2
---
58.22

5. E  99.54
- 9
---
90.54

6. F  8.04
- 0.28
---
7.76

Lesson 13 Subtraction of Decimals (page 41)
1. A  8.9
- 4.3
---
4.6

2. B  37.1
- 4.2
---
32.9

3. C  8.701
- 3.041
---
5.66

4. D  7.1
- 8.2
---
-1.1

5. E  99.54
- 9
---
90.54

6. F  8.04
- 0.28
---
7.76

Lesson 14 Multiplication of Decimals (page 42)
1. A  8.9
× 4.3
---
38.37

2. B  37.1
× 4.2
---
157.82

3. C  8.701
× 3.041
---
26.591

4. D  7.1
× 8.2
---
58.22

5. E  99.54
× 9
---
895.86

6. F  8.04
× 5
---
40.2

Lesson 15 Division of Decimals (page 43)
1. A  8.9
÷ 4.3
---
2

2. B  37.1
÷ 4.2
---
8.8

3. C  8.701
÷ 3.041
---
2.85

4. D  7.1
÷ 8.2
---
0.86

5. E  99.54
÷ 9
---
11.06
4. \( \frac{5}{3} \times \frac{2}{3} = \frac{10}{9} \)  
   [Multiplication of Fractions]

5. \( \frac{8}{3} - \frac{1}{4} = \frac{3}{4} - \frac{1}{4} = \frac{2}{3} \)  
   [Subtraction of Fractions]

6. \( \frac{3}{4} \times \frac{5}{6} = \frac{3}{4} \times \frac{6}{5} = \frac{18}{20} = \frac{9}{10} \)  
   [Division of Fractions]

7. \( \frac{2}{7} \times \frac{1}{4} = \frac{2}{28} = \frac{1}{14} \)  
   [Multiplication of Fractions]

8. \( \frac{3}{5} \div \frac{4}{5} = \frac{3}{4} = \frac{80}{100} = \frac{3}{4} \)  
   [Addition of Fractions]

9. \( \frac{2}{9} + \frac{13}{22} = \frac{22}{22} = 1 \)  
   [Addition of Fractions]

10. \( \frac{9}{5} \div \frac{2}{1} = \frac{18}{10} = \frac{9}{5} \)  
    [Division of Fractions]

11. \( \frac{4}{5} \div \frac{5}{2} = \frac{4 \times 2}{5} = \frac{8}{5} \)  
    [Addition of Fractions]

12. \( \frac{9}{6} - \frac{1}{6} = \frac{54}{6} - \frac{49}{6} = \frac{5}{6} \)  
    [Subtraction of Fractions]

13. \( \frac{2}{3} + \frac{3}{5} = \frac{7}{15} + \frac{6}{15} = \frac{13}{15} \)  
    [Addition of Fractions]

14. \( \frac{7}{15} + \frac{3}{5} = \frac{7}{25} + \frac{1}{25} = \frac{22}{25} \)  
    [Addition of Fractions]

15. \( \frac{3}{7} + \frac{1}{6} = \frac{31}{18} \times \frac{6}{1} = \frac{186}{23} = \frac{4}{3} \)  
    [Division of Fractions]

16. \( \frac{4}{7} - \frac{3}{7} = \frac{1}{7} \)  
    [Subtraction of Fractions]

Lesson 12 Addition of Integers (page 39)

1. \( \frac{8 + 3}{8} = \frac{8 - 3}{8} = 5 \)
2. \( \frac{-4 + 9}{5} = 5 \)
3. \( \frac{9 + 2}{7} = 7 \)
4. \( \frac{4 - 6}{6} = -2 \)
5. \( \frac{-9 + 13}{4} = 4 \)
6. \( \frac{10 + 7}{10} = 3 \)
7. \( \frac{-8 + 8}{0} = 0 \)
8. \( \frac{3 - 9}{3} = -6 \)
9. \( \frac{-7 + 5}{-2} = -2 \)
10. \( \frac{-8 + 7}{1} = -1 \)

Lesson 13 Subtraction of Integers (page 41)

1. \( 27 - 5 = 22 + 5 = 32 \)
2. \( 7 - 8 = 7 + 5 = 15 \)
3. \( -9 - 16 = -25 \)
4. \( 8 - 5 = 8 + 5 = 13 \)

Lesson 14 Multiplication of Integers (page 43)

1. \( 6 \times 4 = 48 \)
2. \( 4 \times 15 = 60 \)
3. \( -12 \times 4 = 48 \)
4. \( 7 \times 7 = 49 \)
5. \( -6 \times 9 = -54 \)
6. \( 7 \times 8 = -56 \)
7. \( -5 \times 8 = -40 \)
8. \( -7 \times 4 = 28 \)
9. \( -8 \times 12 = -96 \)
10. \( 15 \times 15 = 225 \)

Lesson 15 Division of Integers (page 45)

1. \( \frac{-72 + 6}{12} = \frac{60}{12} = 0 \)
### TABE Review: Integers (pages 46-47)

1. **B** \(-30 - 5 = 30 + 5 = 35\)  
   [Subtraction of Integers]
2. **J** \(-80 ÷ 5 = \frac{16}{80}\)  
   [Division of Integers]
3. **B** \(-9 + 4 = -5\)  
   [Addition of Integers]
4. **F** \(4 - 9 = -4 + 9 = 13\)  
   [Subtraction of Integers]
5. **E** \(-99 ÷ -11 = \frac{9}{99}\)  
   [Division of Integers]
6. **H** \(7 + -9 = 7 - 9 = -2\)  
   [Addition of Integers]
7. **D** \(-65 ÷ -5 = \frac{13}{65}\)  
   [Division of Integers]
8. **J** \(-4 - 18 = -22\)  
   [Subtraction of Integers]
9. **C** \(5 × -6 = -30\)  
   [Multiplication of Integers]
10. **H** \(8 × -4 = -32\)  
    [Multiplication of Integers]
11. **A** \(60 ÷ -15 = \frac{-4}{360}\)  
    [Division of Integers]
12. **K** \(5 + -4 = 5 - 4 = 1\)  
    [Addition of Integers]
13. **B** \(26 - -3 = 26 + 3 = 29\)  
    [Subtraction of Integers]
14. **K** \(-76 ÷ 4 = \frac{-19}{36}\)  
    [Opposite signs = negative answer]  
    [Division of Integers]
15. **D** \(-6 + 8 = 2\)  
    [Addition of Integers]
16. **F** \(-7 - 4 = -11\)  
    [Subtraction of Integers]
17. **A** \(6 + -10 = 6 - 10 = -4\)  
    [Addition of Integers]
18. **F** \(84 + -21 = \frac{-4}{84}\)  
    [Division of Integers]
19. **C** \(-3 + 11 = 8\)  
    [Addition of Integers]
20. **G** \(-3 - 11 = -14\)  
    [Subtraction of Integers]

### Lesson 16 Percents—Finding the Part (page 50)

1. **C**  
   \[50\% \text{ of } 9.00 = 0.5 \times 9 = \frac{9.00}{0.5} = 0.45\]  
   \[\$4.50\]
2. **J**  
   \[70\% \text{ of } 54 = 0.7 \times 54 = \frac{54}{0.7} = 37.8\]
3. **A**  
   \[40\% \text{ of } 90 = \frac{90}{0.4} = 36.0\]
4. **G**  
   \[100\% \text{ of } 76 = 1 \times 76 = 76\]
5. **D**  
   \[80\% \text{ of } 10 = 0.8 \times 10 = \frac{10}{0.8} = 8.00\]

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**Level D**  
**Answers and Explanations**  
**65**
6. J 20% of 50 = \[ \frac{50 \times 0.2}{10.0} \]

7. A 60% of 100 = \[ \frac{0.6 \times 100}{100} \times 0.6 \]

72

8. F 100% of 83 = 83

9. E 90% of 80 = \[ \frac{80 \times 0.9}{72.0} \]

10. J 1% of 72 = \[ \frac{0.01 \times 72}{0.72} \]

Lesson 17 Percents—Finding the Whole or Percent (page 53)

1. B 40% of \( \square = 32 \)

\[ \rightarrow 0.4 \times \square = 32 \]

\[ \rightarrow 32 \div 0.4 = 4 \times 320.0 \]

2. G What percent of 100 is 70?

\[ \rightarrow \% \times 100 = 70 \]

\[ \rightarrow 70 \div 100 = \]

\[ \frac{0.7}{100} \times 70.0 = 70\% \]

3. D 24% of \( \square = 72 \)

\[ \rightarrow 0.24 \times \square = 72 \]

\[ \rightarrow 72 \div 0.24 = \]

\[ \frac{300}{24} \times \frac{7200}{24} \]

4. K 20% of \( \square = 54 \)

\[ \rightarrow 0.2 \times \square = 54 \]

\[ \rightarrow 270 \]

\[ \rightarrow 54 \div 0.2 = 2740 \]

5. C What percent of 90 is 99?

\[ \rightarrow \% \times 90 = 99 \]

\[ \rightarrow 99 \div 90 = \]

\[ \frac{1.1}{90.0} \times 110\% \]

6. F 13% of \( \square = 91 \)

\[ \rightarrow 0.13 \times \square = 91 \]

\[ \rightarrow 91 \div 0.13 = \]

\[ \frac{700}{13} \times 100 \]

7. C What percent of 400 is 80?

\[ \rightarrow \% \times 400 = 80 \]

\[ \rightarrow 80 \div 400 = \]

\[ \frac{0.2}{80.0} \times 20\% \]

8. K 70% of \( \square = 70 \)

\[ \rightarrow 0.7 \times \square = 70 \]

\[ \rightarrow 70 \div 0.7 = 100 \]

7. E 15% of \( \square = 75 \)

\[ \rightarrow 0.15 \times \square = 75 \]

\[ \rightarrow 75 \div 0.15 = \]

\[ \frac{500}{15} \times 7500 \]

8. F 90% of $1.70 = 0.9 \times 1.7 = \]

\[ \rightarrow 1.7 \times 0.9 = \]

\[ \frac{1.53}{1.53} \]

9. D 70% of \( \square = 91 \)

\[ \rightarrow 0.7 \times \square = 91 \]

\[ \rightarrow 91 \div 0.7 = \]

\[ \frac{130}{7} \times 7.10 \]

10. H 50% of \( \square = 45 \)

\[ \rightarrow 0.5 \times \square = 45 \]

\[ \rightarrow 45 \div 0.5 = \]

\[ \frac{90}{5} \times 45 \]

11. B 80% of 20 = \[ 0.8 \times 20 = 16.0 \]

[Percent—Finding the Part]

12. F 100% of 43 = \[ 1 \times 43 = 43 \]

[Percent—Finding the Part]
13. **B** What percent of 50 is 65?
   \[ \% \times 50 = 65 \]
   \[ \frac{65}{50} = 1.3 \]
   \[ 130\% \]
   [Percents—Finding the Whole or Percent]

14. **H** 1% of 3.70 = 0.01 \times 3.7 = 0.037
   [Percents—Finding the Part]

15. **E** 11% of \( \square \) = 88
   \[ 0.11 \times \square = 88 \]
   \[ \square = 800 \]
   [Percents—Finding the Whole or Percent]

16. **J** 80% of 100 = 0.8 \times 100 = 80
   [Percents—Finding the Part]

17. **B** 10% of 60 = 0.1 \times 60 = 6.0
   [Percents—Finding the Part]

18. **J** 20% of \( \square \) = 12
   \[ 0.2 \times \square = 12 \]
   \[ \square = 60 \]
   \[ 12 \div 0.2 = 60 \]
   [Percents—Finding the Whole or Percent]

**Performance Assessment (page 56)**

Sample A.

- **D**
  \[ \begin{array}{c}
  42 \\
  + 10 \\
  \hline
  52
  \end{array} \]

1. **C**
   \[ \times \frac{9}{576} \]
   [Multiplication of Whole Numbers—Regrouping]

2. **H**
   \[ \begin{array}{c}
   6276 \\
   - 24 \\
   \hline
   36 \\
   - 36 \\
   0
   \end{array} \]
   [Division of Whole Numbers—No Remainder]

3. **E**
   \[ \times \frac{491}{1964} \]
   [Multiplication of Whole Numbers—Regrouping]

4. **G**
   \[ \frac{23}{8} \\
   12 \\
   - 12 \\
   0 \]
   [Division of Whole Numbers—No Remainder]

5. **C**
   \[ \left( \frac{573}{5} \right) \\
   4.19 \\
   0.44 \]
   [Subtraction of Decimals]

6. **H**
   \[ 6.2 + 2.4 = 8.6 \]
   [Addition of Decimals]

7. **E**
   \[ 15 \text{90} \\
   90 \\
   0 \]
   [Division of Whole Numbers—No Remainder]

8. **F**
   \[ \frac{42}{70} \\
   563 \]
   [Multiplication of Whole Numbers—Regrouping]

9. **D**
   \[ \frac{32}{1} \\
   4 \]
   [Division of Whole Numbers—No Remainder]

10. **H**
    \[ \frac{46}{37} \\
    322 \\
    + 1380 \\
    1702 \]
    [Multiplication of Whole Numbers—Regrouping]

11. **B**
    \[ -96 \div -16 = 6 \]
    \[ 96 \]
    [Division of Integers]

12. **J**
    \[ \begin{array}{c}
    8.421 \\
    + 0.363 \\
    \hline
    8.784
    \end{array} \]
    [Addition of Decimals]

13. **A**
   \[ \frac{8}{5} \times \frac{8}{1} = \frac{32}{5} = 6 \frac{2}{5} \]
   [Multiplication of Fractions]

14. **K**
   \[ 0.2 \times 5.4 = \frac{5.4}{0.2} \times \frac{1}{5} \]
   \[ = \frac{5.4}{0.2} \times \frac{1}{5} \]
   \[ = \frac{6}{1.08} \]
   [Percents—Finding the Part]

15. **B**
   \[ 40\% \times \square = 84 \]
   \[ \frac{0.4 \times \square = 84}{84 \div 0.4 = 210} \]
   \[ \frac{84 \div 210}{84 \div 0.4 = 210} \]
   [Percents—Finding the Whole or Percent]

16. **G**
   \[ \frac{7}{8} - \frac{1}{8} = \frac{6}{8} = \frac{3}{4} \]
   [Subtraction of Fractions]

17. **A**
   \[ 50\% \times 57 = \frac{57}{0.5} \]
   \[ = \frac{3}{28.5} \]
   [Percents—Finding the Part]

18. **H**
   \[ \frac{8}{13} + \frac{5}{13} = \frac{13}{13} = 1 \]
   [Addition of Fractions]

19. **D**
   \[ \frac{3}{4} + \frac{8}{5} = \]
   \[ \frac{5}{20} + \frac{8}{20} = \]
   \[ \frac{13}{20} = \frac{14}{20} \]
   [Addition of Fractions]

20. **G**
    \[ 6 + (-3) = -6 - 3 = 3 \]
    [Addition of Integers]

21. **C**
    \[ -8 \times -6 = 48 \]
    [Multiplication of Integers]
22. \[ \begin{array}{c}
1 \\
\times \quad \frac{2.6}{3.1}
\end{array} \]
\[ \frac{1.26}{7.80} \] [Multiplication of Decimals]
\[ \frac{8.06}{8} \]

23. E What percent of 40 is 96?
\[ \rightarrow \quad \square \% \times 40 = 96 \]
\[ \rightarrow \quad 96 + 40 = \]
\[ \frac{2.4}{2.4} \]
\[ 40 \mid 96.0 = 240\% \]
\[ -80 \]
\[ 160 \]
\[ -160 \]
\[ 0 \]
[Percent—Finding the Whole or Percent]

24. F \[ 0.82 \div 98.400.0 \] [Division of Decimals]
\[ -8.2 \]
\[ 164 \]
\[ -164 \]
\[ 0 \]

25. B \[ -6 - 14 = -20 \]
[Subtraction of Integers]