Lesson 2.5

**Estimate with 2-Digit Divisors**

**Accept all reasonable estimates. Possible answers are given.**

Use compatible numbers to find two estimates.

1. \(18 \div 1,322\)  
   \[1,200 \div 20 = 60\]  
   \[1,400 \div 20 = 70\]

2. \(17 \div 1,569\)  
   \[1,400 \div 20 = 70\]  
   \[1,600 \div 20 = 80\]

3. \(27 \div 735\)  
   \[600 \div 30 = 20\]  
   \[900 \div 30 = 30\]

4. \(12 \div 478\)  
   \[400 \div 10 = 40\]  
   \[500 \div 10 = 50\]

5. \(336 \div 12\)  
   \[300 \div 10 = 30\]  
   \[400 \div 10 = 40\]

6. \(1,418 \div 22\)  
   \[1,400 \div 20 = 70\]  
   \[1,600 \div 20 = 80\]

7. \(16 \div 2,028\)  
   \[2,000 \div 20 = 100\]  
   \[2,200 \div 20 = 110\]

8. \(2,242 \div 33\)  
   \[2,100 \div 30 = 70\]  
   \[2,400 \div 30 = 80\]

Use compatible numbers to estimate the quotient.

9. \(82 \div 5,514\)  
   \[5,600 \div 80 = 70\]  
   \[5,400 \div 60 = 90\]

10. \(61 \div 5,320\)  
    \[900 \div 30 = 30\]  
    \[1,600 \div 20 = 80\]

11. \(28 \div 776\)  
    \[23 \div 1,624\]

**Problem Solving**

13. A cubic yard of topsoil weighs 4,128 pounds. About how many 50-pound bags of topsoil can you fill with one cubic yard of topsoil?

   **about 80 bags**

14. An electronics store places an order for 2,665 USB flash drives. One shipping box holds 36 flash drives. About how many boxes will it take to hold all the flash drives?

   **about 70 boxes**
Lesson 2.6

Divide by 2-Digit Divisors

Divide. Check your answer.

1. \(385 \div 12 = 32 \text{ r}1\)
2. \(837 \div 36 = 23 \text{ r}9\)
3. \(1,650 \div 55 = 30\)
4. \(5,634 \div 18 = 313\)

5. \(7,231 \div 24 = 301 \text{ r}7\)
6. \(5,309 \div 43 = 123 \text{ r}20\)
7. \(37 \div 3,774 = 102\)
8. \(54 \div 1,099 = 20 \text{ r}19\)

9. \(28 \div 6,440 = 230\)
10. \(52 \div 5,256 = 101 \text{ r}4\)
11. \(85 \div 1,955 = 23\)
12. \(46 \div 5,624 = 122 \text{ r}12\)

**Problem Solving**

13. The factory workers make 756 machine parts in 36 hours. Suppose the workers make the same number of machine parts each hour. How many machine parts do they make each hour?

21 parts

14. One bag holds 12 bolts. Several bags filled with bolts are packed into a box and shipped to the factory. The box contains a total of 2,760 bolts. How many bags of bolts are in the box?

230 bags
Name ______________________________

**Interpret the Remainder**

Interpret the remainder to solve.

1. Warren spent 140 hours making 16 wooden toy trucks for a craft fair. If he spent the same amount of time making each truck, how many hours did he spend making each truck?

\[
\begin{array}{c|c}
8 & 140 \\
\hline
16 & -128 \\
\hline
12 & \\
\end{array}
\]

\(8\frac{3}{4} \text{ hours}\)

2. Marcia has 412 bouquets of flowers for centerpieces. She uses 8 flowers for each centerpiece. How many centerpieces can she make?

3. On the 5th grade class picnic, 50 students share 75 sandwiches equally. How many sandwiches does each student get?

\(1\frac{1}{2} \text{ sandwiches}\)

4. One plant container holds 14 tomato seedlings. If you have 1,113 seedlings, how many containers do you need to hold all the seedlings?

\(80 \text{ containers}\)

5. Fiona bought 212 stickers to make a sticker book. If she places 18 stickers on each page, how many pages will her sticker book have?

\(12 \text{ pages}\)

6. Jenny has 220 ounces of cleaning solution that she wants to divide equally among 12 large containers. How much cleaning solution should she put in each container?

\(18\frac{1}{3} \text{ ounces}\)
Lesson 2.8

Adjust Quotients

Adjust the estimated digit in the quotient, if needed. Then divide.

1. \( \frac{16}{976} \)
   \[ \begin{array}{c}
   5 \\
   \hline
   80 \\
   17 \\
   \end{array} \]
   \[ \begin{array}{c}
   61 \\
   96 \\
   16 \\
   \end{array} \]
   \[ \begin{array}{c}
   0 \\
   \end{array} \]

2. \( \frac{24}{689} \)

3. \( \frac{65}{2,210} \)

4. \( \frac{38}{7,035} \)

Divide.

5. \( 2,961 \div 47 \)

6. \( 2,072 \div 86 \)

7. \( 1,280 \div 25 \)

8. \( 31 \div 1,496 \)

9. \( 86 \div 6,290 \)

10. \( 95 \div 4,000 \)

11. \( 44 \div 2,910 \)

12. \( 82 \div 4,018 \)

Problem Solving

13. A copier prints 89 copies in one minute. How long does it take the copier to print 1,958 copies?

22 minutes

14. Erica is saving her money to buy a dining room set that costs $580. If she saves $29 each month, how many months will she need to save to have enough money to buy the set?

20 months
Name ____________________________

Problem Solving • Division

Check students' work.

Show your work. Solve each problem.

1. Duane has 12 times as many baseball cards as Tony. Between them, they have 208 baseball cards. How many baseball cards does each boy have?

   Tony: 16

   Duane: 16 16 16 16 16 16 16 16 16 16 16 16 16 16

   208 ÷ 13 = 16

   Tony: 16 cards; Duane: 192 cards

2. Hallie has 10 times as many pages to read for her homework assignment as Janet. Altogether, they have to read 264 pages. How many pages does each girl have to read?

   Janet: 24 pages; Hallie: 240 pages

3. Hank has 48 fish in his aquarium. He has 11 times as many tetras as guppies. How many of each type of fish does Hank have?

   44 tetras; 4 guppies

4. Kelly has 4 times as many songs on her music player as Lou. Tiffany has 6 times as many songs on her music player as Lou. Altogether, they have 682 songs on their music players. How many songs does Kelly have?

   248 songs