

Finding Missing Dimensions

Fill in the missing numbers.

1

$$\begin{array}{r} 2 \\ \times 7 \\ \hline 5 \end{array}$$

2

$$\begin{array}{r} 0 \\ \times 2 \\ \hline 8 \end{array}$$

3

$$\begin{array}{r} \\ \times \\ \hline 1 9 1 \end{array}$$

4

$$\begin{array}{r} 2 0 \\ \times 5 \\ \hline 3 \end{array}$$

5

$$\begin{array}{r} 2 6 \\ \times 3 1 \\ \hline \end{array}$$

6

$$\begin{array}{r} 3 0 \\ \times \\ \hline 9 0 \end{array}$$

7

$$\begin{array}{r} 1 9 \\ \times 4 7 \\ \hline \end{array}$$

8

$$\begin{array}{r} 3 8 \\ \times 2 1 \\ \hline \end{array}$$

9

$$\begin{array}{r} 1 5 \\ \times \\ \hline 2 2 5 \end{array}$$

10

$$\begin{array}{r} \\ \times 2 \\ \hline 6 0 \end{array}$$

11

$$\begin{array}{r} 5 0 \\ \times \\ \hline 2 5 0 \end{array}$$

12

$$\begin{array}{r} 1 1 8 \\ \times 2 2 \\ \hline \end{array}$$

Finding Missing Factors

Find the missing factor. Use any numbers you want to build it.

1

$$8 \times \underline{\quad} = 104$$

2

$$9 \times \underline{\quad} = 135$$

3

$$\underline{\quad} \times 7 = 98$$

4

$$26 \times 13 = \underline{\quad}$$

5

$$32 \times 16 = \underline{\quad}$$

6

$$19 \times \underline{\quad} = 399$$

Solve.

Sam is making a collage using 4-inch by 6-inch photographs. He bought a rectangular frame that is big enough to hold 18 of his photographs. What might the dimensions of the frame be?

_____ inches by _____ inches

Finding Missing Factors More Efficiently

Answer the questions.

Suzanna ordered 6 pizzas for her birthday party. She wants all 15 people at the party to get the same number of slices.

- 1 Into how many slices should she ask the pizza parlor to cut each pizza?

- 2 How many slices will each person at the party receive?

Raul works in a clothing store. He's arranging a shipment of 360 shirts evenly onto 12 shelves.

- 3 How many shirts should he put on each shelf?

- 4 Uh oh! Two of the shelves broke and dropped all of their shirts. Raul will stack those evenly on the remaining shelves. How many shirts will be on each shelf then?

- 5 The most shirts that can fit on a shelf is 58. If Raul has 12 shelves to use, how many more shirts can he order to fill the shelves?

Estimating Missing Factors and Quotients

Rewrite each division sentence as a multiplication sentence to help you complete the problems. Then use multiples of 10 and smaller multiplication facts to build the missing factor and quotient.

1

$$470 \div \square = 10$$

$$\boxed{10} \times \square = \boxed{470}$$

$$10 \times \square = \square$$

$$10 \times \square = \square$$

2

$$414 \div \square = 18$$

$$\square \times \square = \square$$

$$18 \times \square = \square$$

$$18 \times \square = \square$$

3

$$399 \div \square = 19$$

$$\square \times \square = \square$$

$$19 \times \square = \square$$

$$19 \times \square = \square$$

4

$$783 \div 27 = \underline{\hspace{2cm}}$$

5

$$348 \div \underline{\hspace{2cm}} = 12$$

6

$$966 \div \underline{\hspace{2cm}} = 42$$

Dividing Using Multiplication Puzzles

Use the largest number possible from the chart at each step.

0	1	2	3	4	5	6	7	8	9
0	10	20	30	40	50	60	70	80	90

<p>1</p> <div style="text-align: right; margin-bottom: 10px;"> $\begin{array}{r} \square \\ \square \\ 11 \overline{) 583} \end{array}$ </div> <div style="background-color: #e0e0e0; padding: 5px; margin-bottom: 5px;"> $11 \times \square = \bigcirc$ </div> <div style="text-align: center; margin-bottom: 5px;"> $11 \times \square = \bigcirc$ </div> <div style="background-color: #e0e0e0; padding: 5px; margin-bottom: 5px;"> $11 \times \square = \bigcirc$ </div> <div style="text-align: center;"> $583 \div 11 = \bigcirc$ </div>	<p>2</p> <div style="text-align: right; margin-bottom: 10px;"> $\begin{array}{r} \square \\ \square \\ 24 \overline{) 312} \end{array}$ </div> <div style="background-color: #e0e0e0; padding: 5px; margin-bottom: 5px;"> $24 \times \square = \bigcirc$ </div> <div style="text-align: center; margin-bottom: 5px;"> $24 \times \square = \bigcirc$ </div> <div style="background-color: #e0e0e0; padding: 5px; margin-bottom: 5px;"> $24 \times \square = \bigcirc$ </div> <div style="text-align: center;"> $312 \div 24 = \bigcirc$ </div>	<p>3</p> <div style="text-align: right; margin-bottom: 10px;"> $\begin{array}{r} \square \\ \square \\ 35 \overline{) 1,155} \end{array}$ </div> <div style="background-color: #e0e0e0; padding: 5px; margin-bottom: 5px;"> $35 \times \square = \bigcirc$ </div> <div style="text-align: center; margin-bottom: 5px;"> $35 \times \square = \bigcirc$ </div> <div style="background-color: #e0e0e0; padding: 5px; margin-bottom: 5px;"> $35 \times \square = \bigcirc$ </div> <div style="text-align: center;"> $1,155 \div 35 = \bigcirc$ </div>
<p>4</p> <div style="text-align: right; margin-bottom: 10px;"> $\begin{array}{r} \square \\ \square \\ 72 \overline{) 2,664} \end{array}$ </div> <div style="background-color: #e0e0e0; padding: 5px; margin-bottom: 5px;"> $72 \times \square = \bigcirc$ </div> <div style="text-align: center; margin-bottom: 5px;"> $72 \times \square = \bigcirc$ </div> <div style="background-color: #e0e0e0; padding: 5px; margin-bottom: 5px;"> $72 \times \square = \bigcirc$ </div> <div style="text-align: center;"> $2,664 \div 72 = \bigcirc$ </div>	<p>5</p> <div style="text-align: right; margin-bottom: 10px;"> $\begin{array}{r} \square \\ \square \\ 105 \overline{) 2,625} \end{array}$ </div> <div style="background-color: #e0e0e0; padding: 5px; margin-bottom: 5px;"> $105 \times \square = \bigcirc$ </div> <div style="text-align: center; margin-bottom: 5px;"> $105 \times \square = \bigcirc$ </div> <div style="background-color: #e0e0e0; padding: 5px; margin-bottom: 5px;"> $105 \times \square = \bigcirc$ </div> <div style="text-align: center;"> $2,625 \div 105 = \bigcirc$ </div>	<p>6</p> <div style="text-align: right; margin-bottom: 10px;"> $\begin{array}{r} \square \\ \square \\ 39 \overline{) 1,404} \end{array}$ </div> <div style="background-color: #e0e0e0; padding: 5px; margin-bottom: 5px;"> $39 \times \square = \bigcirc$ </div> <div style="text-align: center; margin-bottom: 5px;"> $39 \times \square = \bigcirc$ </div> <div style="background-color: #e0e0e0; padding: 5px; margin-bottom: 5px;"> $39 \times \square = \bigcirc$ </div> <div style="text-align: center;"> $1,404 \div 39 = \bigcirc$ </div>

Completing Division Sentences

Complete the problems.

1

$$8 \overline{) 872}$$

$$872 \div 8 = \underline{\hspace{2cm}}$$

2

$$9 \overline{) 819}$$

$$819 \div 9 = \underline{\hspace{2cm}}$$

3

$$9 \overline{) 1,287}$$

$$1,287 \div 9 = \underline{\hspace{2cm}}$$

The students in Miss Sterling's class were sponsored for a read-a-thon. For every book they read, they received 1 quarter. By the end of the read-a-thon, the class had read 129 books. The class decided to buy 7 new books with the money they raised.

- 4 If each book costs the same amount, what is the most each one could cost?

- 5 Describe how students can divide up the money in order to buy each book separately. (Note: They can't just divide the quarters into 7 equal groups.)
