

Solve the following problems. Draw tape diagrams to help you solve. Identify if the group size or the number of groups is unknown.

1. 500 milliliters of juice was shared equally by 4 children. How many milliliters of juice did each child get?

2. Kelly separated 618 cookies into baggies. Each baggie contained 3 cookies. How many baggies of cookies did Kelly make?

3. Jeff biked the same distance each day for 5 days. If he traveled 350 miles altogether, how many miles did he travel each day?

5. Five Martians equally share 1,940 Groblarx fruits. How many Groblarx fruits will 3 of the Martians receive?

4. A piece of ribbon 876 inches long was cut by a machine into 4-inch long strips to be made into bows. How many strips were cut?

Solve the following problems. Draw tape diagrams to help you solve. If there is a remainder, shade in a small portion of the tape diagram to represent that portion of the whole.

1. Meneca bought a package of 435 party favors to give to the guests at her birthday party. She calculated that she could give 9 party favors to each guest. How many guests is she expecting?

2. 4,000 pencils were donated to an elementary school. If 8 classrooms shared the pencils equally, how many pencils did each class receive?

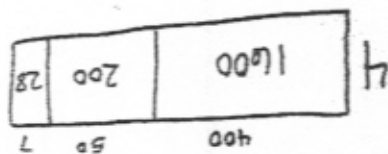
3. 2,008 kilograms of potatoes were packed into sacks weighing 8 kilograms each. How many sacks were packed?

4. A baker made 7 batches of muffins. There was a total of 252 muffins. If there was the same number of muffins in each batch, how many muffins were in a batch?
5. Samantha ran 3,003 meters in 7 days. If she ran the same distance each day, how far did Samantha run in 3 days?

Name _____

Date _____

1. Arabelle solved the following division problem by drawing an area model.



a. What division problem did she solve?

b. Show a number bond to represent Arabelle's area model, and represent the total length using the distributive property.

2. a. Solve $816 \div 4$ using the area model. There is no remainder in this problem.

b. Draw a number bond and use a written method to record your work from Part (a).

Explain the connection of the area model of division to the long division algorithm for three- and four-digit dividends.

3. a. Draw an area model to solve $549 \div 3$.

b. Draw a number bond to represent this problem.

c. Record your work using the long division algorithm.

4. a. Draw an area model to solve $2,762 \div 2$.

b. Draw a number bond to represent this problem.

c. Record your work using the long division algorithm.

ones	tens	hundreds	thousands

c. 30×42

$$= (3 \times 10) \times \underline{\hspace{2cm}}$$

$$= 3 \times (10 \times \underline{\hspace{2cm}})$$

$$= \underline{\hspace{2cm}}$$

ones	tens	hundreds	thousands

b. 30×34

$$= (3 \times 10) \times \underline{\hspace{2cm}}$$

$$= 3 \times (10 \times \underline{\hspace{2cm}})$$

$$= \underline{\hspace{2cm}}$$

ones	tens	hundreds

a. 20×34

$$= \underline{\hspace{2cm}} \times 10 \times 34$$

$$= \underline{\hspace{2cm}} \times (10 \times 34)$$

$$= \underline{\hspace{2cm}}$$

1. Use the associative property to rewrite each expression. Solve using disks, and then complete the number sentences.

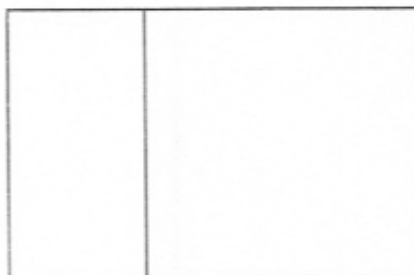
Name _____ Date _____

2. Use the associative property and place value disks to solve.
- 20×16
 - 40×32

3. Use the associative property without place value disks to solve.
- 30×21
 - 60×42

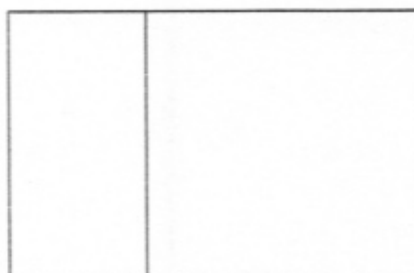
4. Use the distributive property to solve the following. Distribute the second factor.
- 40×43
 - 70×23

3. 50×38



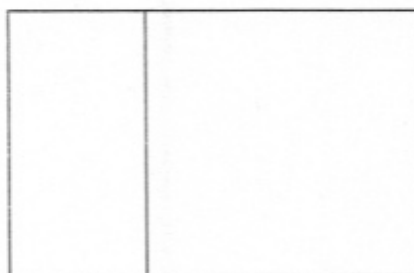
$$\begin{array}{r} \\ \\ \hline 38 \\ \times 50 \\ \hline \end{array} +$$

2. 40×58



$$\begin{array}{r} \\ \\ \hline 58 \\ \times 40 \\ \hline \end{array} +$$

1. 30×17



$$\begin{array}{r} \\ \\ \hline 17 \\ \times 30 \\ \hline \end{array} +$$

Use an area model to represent the following expressions. Then, record the partial products and solve.

Name _____ Date _____

Draw an area model to represent the following expressions. Then, record the partial products vertically and solve.

4. 60×19

5. 20×44

Visualize the area model, and solve the following expressions numerically.

6. 20×88

7. 30×88

8. 70×47

9. 80×65

Name _____ Date _____

Solve the following problems. Draw tape diagrams to help you solve. Identify if the group size or the number of groups is unknown.

- 572 cars were parked in a parking garage. The same number of cars was parked on each floor. If there were 4 floors, how many cars were parked on each floor?

- 356 kilograms of flour were packed into sacks holding 2 kilograms each. How many sacks were packed?

Name _____

Date _____

Solve the following problems. Draw tape diagrams to help you solve. If there is a remainder, shade in a small portion of the tape diagram to represent that portion of the whole.

1. Mr. Foote needs exactly 6 folders for each fourth-grade student at Hoover Elementary School. If he bought 726 folders, to how many students can he supply folders?

2. Mrs. Terrance has a large bin of 236 crayons. She divides them equally among four containers. How many crayons does Mrs. Terrance have in each container?

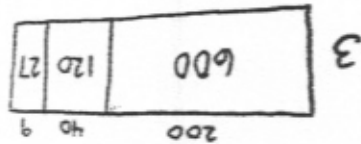
2. a. Draw an area model to solve $1,368 \div 2$.

b. Draw a number bond to represent this problem.

c. Record your work using the long division algorithm.

b. Show a number bond to represent Anna's area model, and represent the total length using the distributive property.

a. What division problem did she solve?



1. Anna solved the following division problem by drawing an area model.

Name _____ Date _____

Name _____

Date _____

1. Use the associative property to rewrite each expression. Solve using disks, and then complete the number sentences.

$$20 \times 41$$

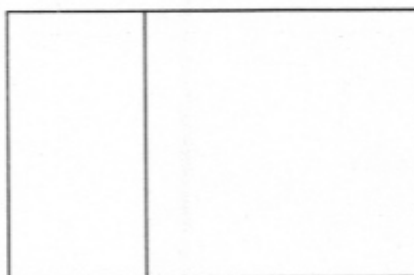
$$\underline{\quad} \times \underline{\quad} \times \underline{\quad} = \underline{\quad}$$

ones	tens	hundreds

2. Distribute 32 as $30 + 2$ and solve.

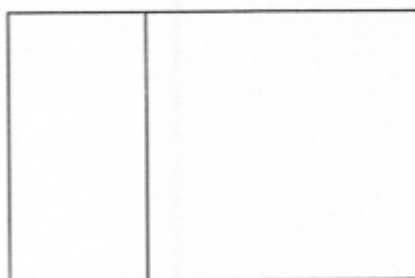
$$60 \times 32$$

2. 40×76



$$\begin{array}{r} \underline{\hspace{2cm}} \\ \underline{\hspace{2cm}} \\ \times 40 \\ \hline 76 \end{array}$$

1. 30×93



$$\begin{array}{r} \underline{\hspace{2cm}} \\ \underline{\hspace{2cm}} \\ \times 30 \\ \hline 93 \end{array}$$

Use an area model to represent the following expressions. Then, record the partial products and solve.

Name _____ Date _____