Name
Date $\qquad$

1. Determine the perimeter and area of rectangles $A$ and $B$. Include labels.

$\qquad$
$A=$
$\qquad$
A =
$\mathrm{P}=$ $\qquad$

$$
P=
$$

2. Determine the perimeter and area of each rectangle. Include labels.
a. $\quad 6 \mathrm{~cm}$

b.

$P=$ $\qquad$
$A=$ $\qquad$
$P=$ $\qquad$

$$
A=
$$

3. Determine the perimeter of each rectangle. Include labels.

166 m
a.

b.
b.


$$
P=
$$

$\qquad$
4. Given the rectangle's area, find the unknown side length. Include labels.
a.

b.


$$
X=
$$

$\boldsymbol{X}=$ $\qquad$
5. Given the rectangle's perimeter, find the unknown side length. Include labels.
20 cm
a. $P=120 \mathrm{~cm}$

b. $P=1,000 \mathrm{~m}$

$\boldsymbol{X}=$ $\qquad$
$\qquad$
$\boldsymbol{X}=$
6. Each of the following rectangles has whole number side lengths. Given the area and perimeter, find the length and width. Include labels.
a. $P=20 \mathrm{~cm}$
$1=$

b. $P=28 \mathrm{~m}$

$\mid=$ $\qquad$

Name $\qquad$ Date $\qquad$


1. A rectangular porch is 4 feet wide. It is 3 times as long as it is wide.
a. Label the diagram with the dimensions of the porch.

b. Find the perimeter of the porch. Include a label.

$$
P=
$$

$\qquad$
2. A narrow rectangular banner is 5 inches wide. It is 6 times as long as it is wide.
a. Draw a diagram of the banner and label its dimensions.
$\square$
b. Find the perimeter and area of the banner. $\mathrm{P}=$ $\qquad$ $A=$ $\qquad$
3. The area of a rectangle is 42 square centimeters. Its length is 7 centimeters. Draw and label this rectangle.
a. What is the width of the rectangle? $\mathrm{W}=$ $\qquad$
b. Charlie wants to draw a second rectangle that is the same length but is 3 times as wide. Draw and label Charlie's second rectangle.
c. What is the perimeter of Charlie's second rectangle? $P=$ $\qquad$
4. The area of Betsy's rectangular sandbox is 20 square feet. The longer side measures 5 feet. The sandbox at the park is twice as long and twice as wide as Betsy's.
a. Draw and label a diagram of Betsy's sandbox. What is its perimeter? $\mathrm{P}=$ $\qquad$
b. Draw and label a diagram of the sandbox at the park. What is its perimeter? $\mathrm{P}=$ $\qquad$
c. What is the relationship between the two perimeters?
d. Find the area of the park's sandbox using the formula $A=/ \times w$.

Area of the park's sandbox $=$ $\qquad$
e. The sandbox at the park has an area that is how many times that of Betsy's sandbox?

The sandbox area $=$ $\qquad$ times the area of Betsy's sandbox.

Name $\qquad$ Date $\qquad$

Example:

$$
\begin{aligned}
& 10 \times 5=\frac{50}{10 \times 5 \text { ones }=5 \text { tens }}
\end{aligned}
$$

| thousands | hundreds | tens | ones |
| :--- | :--- | :--- | :---: |
|  |  |  | 0000 |
|  |  | 00000 |  |

1. Draw number disks and arrows as shown to represent each product.

| thousands | hundreds | tens | ones |
| :---: | :---: | :---: | :---: |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

a. $100 \times 5=$ $\qquad$
$(10 \times 5) \times 10=$ $\qquad$
$100 \times 5$ ones $=$ $\qquad$

| thousands | hundreds | tens | ones |
| :---: | :---: | :---: | :---: |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

b. $1,000 \times 5=$ $\qquad$
$(10 \times 5) \times 10 \times 10=$ $\qquad$
$1,000 \times 5$ ones $=$ $\qquad$

| thousands | hundreds | tens | ones |
| :---: | :---: | :---: | :---: |
|  |  |  |  |
|  |  |  |  |

2. Complete the following equations. Use the place value chart if needed.
a. $6 \times 10=$ $\qquad$ b. $\qquad$ $\times 6=600$
c. $6,000=$ $\qquad$ $\times 1,000$
d. $10 \times 4=$ $\qquad$
e. $4 \times$ $\qquad$ $=400$
f. $\qquad$ $\times 4=4,000$
g. $1,000 \times 9=$ $\qquad$
h. $\qquad$ $=10 \times 9$
i. $900=$ $\qquad$ $\times 100$
3. Draw number disks and arrows as shown to represent each product.
a. $10 \times 12=$ $\qquad$ $10 \times(1$ ten 2 ones $)=$ $\qquad$

| thousands | hundreds | tens | ones |
| :--- | :--- | :--- | :--- |
|  |  |  |  |
|  |  |  |  |

b. $100 \times 18=$ $\qquad$ $(10 \times 18) \times 10=$ $\qquad$ $100 \times(1$ ten 8 ones $)=$ $\qquad$

| thousands | hundreds | tens | ones |
| :---: | :---: | :---: | :---: |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

c. $1,000 \times 25=$ $\qquad$ $(10 \times 25) \times 10 \times 10=$ $\qquad$
$1,000 \times(2$ tens 5 ones $)=$ $\qquad$ -

| thousands | hundreds | tens | ones |
| :---: | :---: | :---: | :---: |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

4. Decompose each multiple of 10,100 , or 1,000 before multiplying.
a. $3 \times 40=3 \times 4 \times$ $\qquad$ c. $3 \times 200=3 x$ $\qquad$ x $\qquad$
$=12 \times$ $\qquad$
$=$ $\qquad$
$=$ $\qquad$ $\times$ $\qquad$
$=$ $\qquad$
b. $4 \times 4,000=$ $\qquad$ $\times \quad \times$ $\qquad$ d. $5 \times 4,000=$ $\qquad$ $\times \quad \times$ $\qquad$
$\qquad$
$=$ $\qquad$ $\times$ $\qquad$
$=$ $\qquad$
$=$ $\qquad$
$\qquad$

Name $\qquad$ Date $\qquad$
Draw number disks to represent the value of the following expressions.

1. $2 \times 3=$ $\qquad$

2 times $\qquad$ ones is $\qquad$ ones.
2. $2 \times 30=$ $\qquad$

2 times $\qquad$ tens is $\qquad$ .

3. $2 \times 300=$ $\qquad$
2 times $\qquad$ hundreds is $\qquad$ .
4. $2 \times 3,000=$ $\qquad$

| hundreds | tens | ones |
| :---: | :---: | :---: |
|  |  |  |
|  |  |  |
|  |  |  |

$\qquad$

| thousands | hundreds | tens | ones |
| :--- | :--- | :--- | :--- |
|  |  |  |  |
|  |  |  |  |

$\qquad$ times $\qquad$ thousands is $\qquad$ .
5. Find the products.

| a. $20 \times 7=$ | b. $3 \times 60=$ | c. $3 \times 400=$ | d. $2 \times 800=$ |
| :--- | :--- | :--- | :--- |
| e. $7 \times 30=$ | f. $60 \times 6=$ | g. $400 \times 4=$ | h. $4 \times 8,000=$ |
| i. $5 \times 30=$ | j. $5 \times 60=$ | k. $5 \times 400=$ | I. $8,000 \times 5=$ |

6. Brianna bought 3 packs of balloons for a party. Each pack has 60 balloons. How many balloons does Brianna have?
7. Jordan has twenty times as many baseball cards as his brother. His brother has 9 cards. How many cards does Jordan have?
8. The aquarium has 30 times as many fish in one tank as Jacob has. Jacob has 9 fish. How many fish does the aquarium have?

Name $\qquad$ Date $\qquad$
Represent the following problem by drawing disks in the place value chart.

1. To solve $20 \times 40$, think:
$(2$ tens $) \times(4$ tens $)=$
$2 \times 4 \times 10 \times 10=$
$20 \times 40=$ $\qquad$

| Hundreds | Tens | Ones |
| :--- | :--- | :--- |
|  |  |  |
|  |  |  |
|  |  |  |

2. Use the word form of the numbers to find the products.
a. 2 tens $\times 4$ tens $=$ $\qquad$ hundreds
$20 \times 40=$ $\qquad$
b. 3 tens $\times 4$ tens $=$ $\qquad$ hundreds
$30 \times 40=$ $\qquad$
c. 2 tens $\times 5$ tens $=$ $\qquad$
$\qquad$ $20 \times 50=$ $\qquad$
d. 4 tens $\times 8$ tens $=$ $\qquad$
$\qquad$
$40 \times 80=$ $\qquad$
3. Rewrite each equation in unit form and solve.
a. $20 \times 20=$ $\qquad$
2 tens $\times 2$ tens $=$ $\qquad$ hundreds
b. $60 \times 20=$ $\qquad$

6 tens $\times 2$ $\qquad$ $=$ $\qquad$ hundreds
c. $70 \times 20=$ $\qquad$
$7 \ldots \times 2$ $\qquad$
$\qquad$ hundreds
d. $70 \times 30=$ $\qquad$
$\qquad$ $=$ $\qquad$ hundreds
e. $40 \times 50=$ $\qquad$
$\qquad$ $=$ $\qquad$
$\qquad$
f. $30 \times 60=$ $\qquad$ $\longrightarrow \quad \mathrm{X}$ $\qquad$
$\qquad$

1. Show partial products with disks on the place value chart, and record the partial products vertically as shown below.
a. $1 \times 43$


| 4 | 3 |
| ---: | :--- |
| $\times$ |  |
|  |  |$(1 \times 3)$

b. $2 \times 43$

| tens | ones |
| :---: | :---: |
|  |  |
|  |  |

43
$\times 2$
c. $3 \times 43$

| hundreds | tens | ones |
| :---: | :---: | :---: |
|  |  |  |
|  |  |  |

43
$\times 3$
d. $4 \times 43$

e. $2 \times 36$

| hundreds | tens | ones |
| :---: | :---: | :---: |
|  |  |  |
|  |  |  |
|  |  |  |

f. $3 \times 69$


43
$\begin{array}{r} \\ \times 4 \\ \hline\end{array}$

36
$\times 2$

69
$\times 3$

Name $\qquad$ Date $\qquad$

1. Represent the following expressions with disks that match the partial products.
a. $1 \times 213$

| hundreds | tens | ones |
| :---: | :---: | :---: |
|  |  |  |
|  |  |  |
|  |  |  |



b. $2 \times 213$

c. $3 \times 214$

| thousands | hundreds | tens | ones |
| :---: | :---: | :---: | :---: |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |


d. $3 \times 1,254$

| thousands | hundreds | tens | ones |
| :---: | :---: | :---: | :---: |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

e. $2 \times 4,036$

| thousands | hundreds | tens | ones |
| :---: | :---: | :---: | :---: |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

f. $3 \times 2,546$

| thousands | hundreds | tens | ones |
| :---: | :---: | :---: | :---: |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |


| 1254 |
| ---: |
| $\times$ |



Name $\qquad$ Date $\qquad$


1. Solve the following expressions using the partial products method, and the area model.
a. $4 \times 425$

425

| 4 |
| :--- |
| $\times \quad 4$ |


b. $7 \times 534$

534

| 7 |
| :--- |


c. $8 \times 209$

209
$\times \quad 8$

2. Solve using the partial products and area model method. Kayla's school has 258 students. Janet's school has 3 times as many students as Kayla's. How many students are in Janet's school?

3. Model with a tape diagram and solve any way.

4 times as much as 467 .

## Solve any way.

4. $531 \times 7$
5. 3 times as many as 2,805 .
6. A restaurant sells 925 pounds of spaghetti and 725 pounds of linguini every month. After 9 months, how many pounds of pasta does the restaurant sell? Write your answer as a statement.

Name $\qquad$ Date $\qquad$

1. The table shows the cost of party favors. Each party guest receives a bag with 1 balloon, 1 Iollipop, and 1 bracelet.
a. What is the total cost for 1 guest?

| Item | Cost |
| :---: | :---: |
| 1 balloon | 26 C |
| 1 lollipop | 14 C |
| 1 bracelet | 33 C |

1 guest $\square$
b. What is the total cost for 9 guests?

## 9 guests



Work Space:


OR
Partial Products

2. The Turner family uses 148 liters of water per day. The Hill family uses 3 times as much water per day. How much water does the Hill family use per day?

3. Jayden has 347 marbles. Ellen has 4 times as many as Jayden. How many marbles does Ellen have?
a. Draw a tape diagram:
b. Use partial products to solve:

Jayden

Ellen


## 4. Write a word problem that would go with this drawing. Include a solution.



| 167 | 167 | 167 |
| :--- | :--- | :--- |

Name $\qquad$ Date $\qquad$


Solve the following problems using arrays.

1. There are 19 identical socks. How many pairs of socks are there? Will there be any socks without a match? If so, how many?
2. If it takes 8 inches of ribbon to make a bow, how many bows can be made from 3 feet of ribbon ( 1 foot = 12 inches)? Will any ribbon be left over? If so, how much?
3. The library has 27 chairs and 5 tables. If the same number of chairs are placed at each table, how many chairs can be placed at each table? Will there be any extra chairs? If so, how many?

Solve using tape diagrams.
4. The baker has 42 kilograms of flour. She uses 8 kilograms each day. After how many days will she need to buy more flour?
5. Caleb has 76 apples. He wants to bake as many pies as he can. If it takes 8 apples to make each pie, how many apples will he use? How many apples will not be used?
6. Forty-five people are going to the beach. Seven people can ride in each van. How many vans will be required to get everyone to the beach?


Name
LESSON 16 PROBLEM SET
Show the division using disks. Check your quotient and remainder by using multiplication and addition.

1. $7 \div 2$

| Ones |
| :---: |
|  |
|  |
|  |

Check Your Work

3
quotient $=$ $\qquad$
remainder $=$ $\qquad$
2. $27 \div 2$

| Tens | Ones |
| :---: | :---: |
|  |  |
|  |  |
|  |  |

$\qquad$
remainder = $\qquad$
3. $8 \div 3$

4. $38 \div 3$

5. $6 \div 4$


Check Your Work
$\qquad$

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Name $\qquad$ Date $\qquad$


Show the division using disks. Check your quotient and remainder by using multiplication and addition.

1. $5 \div 2$

| Ones |
| :---: |
|  |
|  |
| $\ldots$ |
|  |
|  | quotient $=$ $\qquad$ remainder $=$ $\qquad$

2. $50 \div 2$

| Tens | Ones |
| :---: | :---: |
|  |  |
|  |  |
|  |  |

quotient $=$ ___ $\quad$ Check Your Work $\quad$

3. $7 \div 3$


| quotient $=$ Check Your Work |
| :--- | :--- |
| remainder $=$ |

4. $75 \div 3$

| Tens | Ones |
| :---: | :---: |
|  |  |
|  |  |
| $\ldots$ |  |
| $\ldots$ |  |

Check Your Work
quotient $=$ $\qquad$
remainder = $\qquad$

quotient $=$ remainder $=\ldots$ Check Your Work $\quad$|  |
| :--- |

5. $9 \div 4$

6. $92 \div 4$

| Tens | Ones |
| :---: | :---: |
|  |  |
|  |  |
|  |  |

quotient $=$ remainder $=\ldots$ Check Your Work

Name $\qquad$ Date $\qquad$
Solve using the Forgiving Method.

1. $46 \div 2$ 年


Name $\qquad$ Date $\qquad$


1. Alfred solved a multiplication problem by drawing an area model, but he left off the length measurements along the top. Can you figure out the missing measurements?

$4 x$ $\qquad$ $=72$
a. Show a number bond to represent Alfred's area model.

2. Fill in the missing lengths on the area models and complete the number bond.
a.

b.



## Name

$\qquad$ Date $\qquad$

1. Use number bonds to divide greater numbers.
a.

b.


$$
68 \div 4=
$$

c.

$75 \div 5=$ $\qquad$
d.

$104 \div 8=$ $\qquad$
2. Decompose the whole into multiples of the divisor to complete the number bonds.
a.

b.


$$
48 \div 3=
$$

$\qquad$


$$
52 \div 4=
$$

$\qquad$
c.


$$
84 \div 7=
$$

$\qquad$


$$
90 \div 6=
$$

$\qquad$

Name $\qquad$ Date $\qquad$

1. Solve $37 \div 2$ using an area model.

2. Solve $76 \div 3$ using an area model.

3. Carolina solved the following division problem by drawing an area model.


What division problem did she solve? $\qquad$ $\div$ $\qquad$ $=$ $\qquad$ $r$ $\qquad$

Solve the following problems using the area model.

8. Seventy-three students are divided into groups of 6 students each. How many groups of 6 students are there? How many students will not be in a group of 6 ?

Name $\qquad$ Date $\qquad$

1. Record the factors of the given numbers as multiplication sentences and as a list in order from least to greatest. Classify each as prime ( P ) or composite (C). The first problem is done for you.

|  | Multiplication Sentences | Factors | P or C |
| :--- | :--- | :--- | :---: |
| a. | $4 \times 4=4 \quad 2 \times 2=4$ | The factors of 4 are: <br> 1,2, and 4 | C |
| b. | 6 | The factors of 6 are: |  |
| c. | 7 | The factors of 7 are: |  |
| d. | 9 | The factors of 9 are: |  |
| e. | 12 | The factors of 12 are: |  |
| f. | 13 |  |  |
| g. | 15 | 16 | The factors of 13 are: |


| i. | 18 | The factors of 18 are: |  |
| :--- | :--- | :--- | :--- |
| j. | 19 | The factors of 19 are: |  |
| k. | 21 | The factors of 21 are: |  |
| I. | 24 | The factors of 24 are: |  |

2. Sheila has 28 stickers to divide evenly among 3 friends. She thinks there will be no leftovers. Use what you know about factor pairs to explain if Sheila is correct.

Name $\qquad$ Date $\qquad$

1. Explain your thinking, or use division or multiplication to answer the following.

| a. Is 2 a factor of $84 ?$ | b. Is 2 a factor of $83 ?$ |
| :--- | :--- |
| c. Is 3 a factor of 63 ? | d. Is 2 a factor of 92 ? |
| e. Is 6 a factor of $84 ?$ | f. Is 4 a factor of $88 ?$ |
| g. Is 5 a factor of $84 ?$ | h. Is 8 a factor of $92 ?$ |

1. Use the associative property to find more factors of 24 and 36 .
a. $24=12 \times 2$
b. $36=\ldots \times 4$
$=(\ldots \times 3) \times 2$
$=\ldots \times(3 \times 2)$
$=\ldots \times 6$
$\qquad$

$$
\begin{aligned}
& =(\ldots \quad \times 3) \times 4 \\
& =\ldots \quad \times(3 \times 4) \\
& =\ldots \times 12 \\
& =\ldots
\end{aligned}
$$

2. Use the Forgiving Method of division to show that 4 is a factor of 56,72 , and 80 .
$56 \div 4$
$72 \div 4$
$80 \div 4$


Name $\qquad$ Date $\qquad$

1. List the numbers that have 24 as a multiple.
2. Use mental math, division, or the associate property to solve.
a. Is 12 a multiple of 4 ? $\qquad$ Is 4 a factor of 12 ? $\qquad$
b. Is 42 a multiple of 8 ? $\qquad$ Is 8 a factor of 42 ? $\qquad$
c. Is 84 a multiple of 6 ? $\qquad$ Is 6 a factor of 84 ? $\qquad$
3. Can a prime number be a multiple of any other number except 1 or itself? Explain your reasons why.
4. Follow the directions below.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 |
| 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 |
| 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 |
| 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 |
| 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 |
| 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 |
| 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 |
| 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 100 |

a. Circle in red the multiples of 2 . When a number is a multiple of 2 , what are the possible values for the ones digit? $\qquad$
b. Shade in green the multiples of 3 . Choose one. What do you notice about the sum of the digits? Choose another. What do you notice about the sum of the digits? $\qquad$
c. Circle in blue the multiples of 5 . When a number is a multiple of 5 , what are the possible values for the ones digit? $\qquad$
d. Draw an $X$ over the multiples of 10 . What digit do all multiples of 10 have in common? What is the digit? $\qquad$

Name $\qquad$ Date $\qquad$

1. Draw number disks to represent the following problems. Rewrite each in unit form and solve.
a. $6 \div 2=$ $\qquad$ (1) (1) 1
(1) (1)
6 ones $\div 2=$ $\qquad$ ones
b. $60 \div 2=$ $\qquad$ 6 tens $\div 2=$ $\qquad$
c. $600 \div 2=$ $\qquad$
$\qquad$
d. $6,000 \div 2=$ $\qquad$
$\qquad$ $\div 2=$ $\qquad$
e. $9 \div 3=$ $\qquad$
9 ones $\div 3=$ $\qquad$ ones
f. $90 \div 3=$ $\qquad$
$\qquad$ $\div 3=$ $\qquad$
g. $900 \div 3=$ $\qquad$
$\qquad$ $\div 3=$ $\qquad$
2. Rewrite each in unit form. Solve for the quotient.

| a. $800 \div 2=400$ <br> 8 hundreds $\div 2=$ <br> 4 hundreds | b. $600 \div 2$ | c. $800 \div 4$ |
| :---: | :---: | :---: |
| d. $300 \div 6$ $30 \text { tens } \div 6=$ $\qquad$ tens | e. $240 \div 4$ | f. $450 \div 5$ |
| g. $3,600 \div 4$ <br> 36 hundreds $\div 4=$ $\qquad$ hundreds | h. $2,400 \div 4$ | i. $2,400 \div 3$ |

## Draw tape diagrams to solve.

4. Some sand weighs 2,800 kilograms. It is divided equally between 4 trucks. How many kilograms of sand are in each truck?
5. Ivy has 5 times as many stickers as Adrian has. Ivy has 350 stickers. How many stickers does Adrian have?

Name $\qquad$ Date $\qquad$

1. Divide using the forgiving method.

| a. $574 \div 2$ | b. $861 \div 3$ |
| :---: | :---: |
| c. $354 \div 2$ | d. $354 \div 3$ |
| e. $873 \div 4$ | f. $591 \div 5$ |


| g. $275 \div 3$ | h. $459 \div 5$ |
| :---: | :---: |
| i. $678 \div 4$ | j. $955 \div 4$ |

2. Zach filled 581 one-liter bottles with apple cider. He distributed the bottles evenly to 4 stores. How many liter bottles did each of the stores receive? Were there any bottles left over? If so, how many?

Name $\qquad$ Date $\qquad$


1. Divide using the Forgiving Method.
a. $1,672 \div 4$

| e. $7,955 \div 5$ | f. $7,574 \div 5$ |
| :---: | :---: |
| g. 7,469 $\div 3$ | h. $9,956 \div 4$ |
| $\bar{j}$ | $\Gamma$ |

Name $\qquad$ Date $\qquad$


Draw a tape diagram to solve. Identify if the group size or the number of groups is unknown.

1. Monique needs exactly 4 plates on each table for the banquet. If she has 312 plates, how many tables is she able to prepare?

$\qquad$ group size unknown
$\qquad$ number of groups unknown
2. 2,365 books were donated to an elementary school. If 5 classrooms shared the books equally, how many books did each class receive?

$\qquad$ group size unknown
$\qquad$ number of groups unknown
3. If 1,503 kilograms of rice was packed in sacks weighing 3 kilograms each, how many sacks were packed?

group size unknown
number of groups unknown
4. Rita made 5 batches of cookies. There were a total of 2,400 cookies. If there were the same number of cookies in each batch, how many cookies were in each batch?
$\square$
group size unknown
number of groups unknown

Name $\qquad$ Date $\qquad$
Use the forgiving method of division to solve.

1. A concert hall contains 8 sections of seats with the same number of seats in each section. If there are 248 seats,
 how many seats are in each section?
2. In one day, the bakery made 719 bagels. The bagels were divided into 9 equal shipments. A few bagels were left over and given to the baker. How many bagels did the baker get?

3. The sweet shop has 614 pieces of candy. They packed the candy into bags with 7 pieces in each bag. How
 many bags of candy did they fill? How many pieces of candy were left?
4. There were 904 children signed up for the relay race. If there were 6 children on each team, how many teams were made? The remaining children served as referees.
 How many children served as referees?

Name $\qquad$ Date $\qquad$


Use an area model to represent the following expressions in word form.
Record the partial products and solve.

1. $20 \times 22$


20
$\times 22$
2. $50 \times 41$


50
41
$\times 4$

Draw an area model to represent the following expressions in standard form. Record the partial products vertically and solve.
3. $80 \times 32$

4. $70 \times 54$


Solve using partial products.
5. $30 \times 68$
6. $60 \times 34$
$\times$

Name $\qquad$ Date $\qquad$

1. Write the expression shown by these area models. $\qquad$ $x$ $\qquad$


Use the distributive property to find the product.
$14 \times 12=(10 \times$ $\qquad$ ) $+(10 x$ $\qquad$ ) $+(4 \times$ $\qquad$ ) $+(4 x$ $\qquad$
$14 \times 12=$ $\qquad$ $+$ $\qquad$ $+$ $\qquad$ $+$ $\qquad$
$14 \times 12=$ $\qquad$
2. Use an area model to represent the following expressions. Record the partial products and solve.
a. $22 \times 14$

22
$\times 14$
$\qquad$
$\qquad$
$\qquad$
$+$

Draw an area model to solve. Record the partial products vertically and solve.
3. $25 \times 32$

$\qquad$

4. $35 \times 42$

$\times$
$\qquad$
$\qquad$
$\qquad$
$+$


Solve using four partial products.
5. $42 \times 11$
$\times$
6. $46 \times 11$
$\times$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$+$

Name $\qquad$ Date $\qquad$

1. Solve $12 \times 14$ using 4 partial products and 2 partial products.

2. 


2. Solve $43 \times 32$ using the area model. Add cloumns to record two partial products.

3. Solve using the area model. Add the columns to record two partial products.
a. $57 \times 15$
b. $46 \times 35$


57


46
$\times \quad 35$
$\qquad$
$\qquad$
$\qquad$

