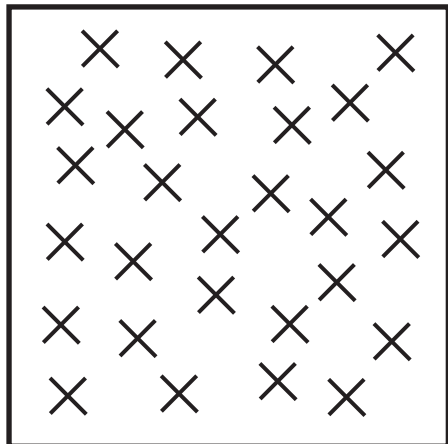Name _____

1

About how many **X**'s are there in the square?

Name _____

Try This

- Use Two-Color Counters to build an array for the problem.
- Draw your array in the first box and write the product.
- Use the commutative property to build a different array.
- Draw the array in the second box and write the multiplication sentence.

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

2. $4 \times 2 =$ _____   _____ $\times$ _____ $=$ _____

3. $3 \times 4 =$ _____   _____ $\times$ _____ $=$ _____

Name _____

Write a multiplication sentence to solve the problem. Use the commutative property to write a different number sentence. Complete the description of the new situation that goes with the new number sentence.

4. Your teacher has 4 new boxes of crayons. If each box has 6 crayons, how many crayons does she have?

_____ × _____ = _____

_____ × _____ = _____

_____ boxes

_____ crayons in each box

_____ crayons in all

5. You ate 3 meals every day on your vacation. If your vacation was 7 days, how many meals did you eat?

_____ × _____ = _____
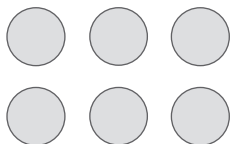
_____ × _____ = _____
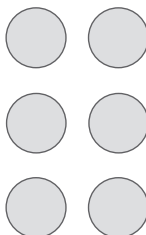
_____ days

_____ meals each day

_____ meals in all

Name _____

Use Two-Color Counters to build the models. Use the models to complete the number sentences.

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

Use Two-Color Counters to build an array for the problem. Draw your array in the first box and write the product. Use the commutative property to build a different array. Draw the array in the second box and write the multiplication sentence.

2. $5 \times 2 =$ _____ $2 \times 5 =$ _____

3. $4 \times 5 =$ _____   _____ $\times$ _____ $=$ _____

Write a multiplication sentence to solve the problem. Use the commutative property to write a different number sentence. Complete the description of the new situation that goes with the new number sentence.

4. You have 2 packs of gum. Each pack has 7 pieces. How many pieces of gum do you have?

_____ × _____ = _____

_____ × _____ = _____

_____ packs

_____ pieces in each pack

_____ pieces in all

5. For 6 months, you read 3 books every month. How many books did you read in all?

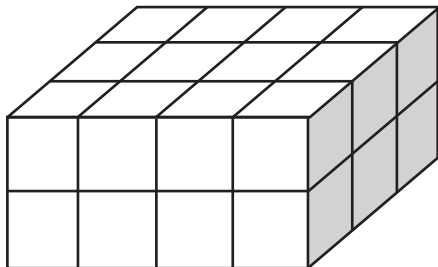_____ × _____ = _____

_____ × _____ = _____

_____ months

_____ books in each month

_____ books in all

2

a. How many small cubes are there?

b. The figure shown is a 3 x 2 x 4. How many small cubes are in a 2 x 4 x 5 figure?
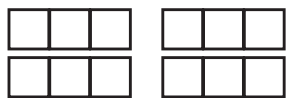
Name _____

Try This

You have 2 lunch packs of carrot sticks. Each lunch pack contains 2 bags with 3 carrot sticks in each bag. How many carrot sticks do you have?

- Use Color Tiles to build two different models for the problem.

- Draw your models.

- Write a number sentence for each model.

$2 \times 2 \times 3 = ?$

2 lunch packs of 2 bags,

So 4 bags of 3 carrot sticks.
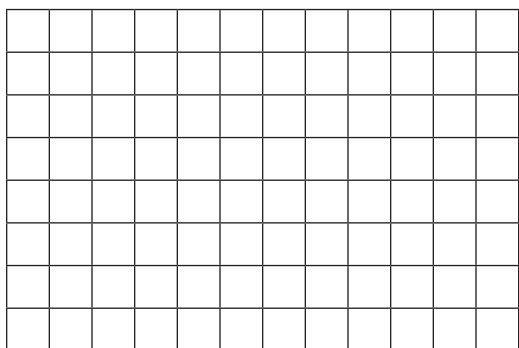
$(2 \times 2) \times 3 = 4 \times 3 = 12$

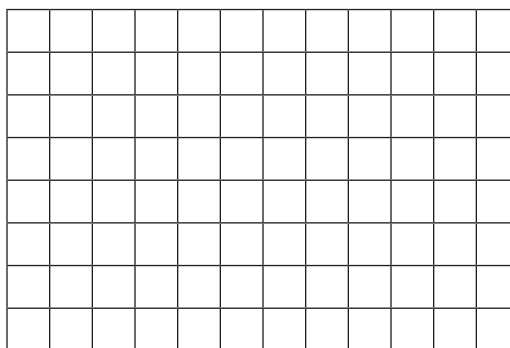2 bags of 3 carrot sticks,

So 2 lunch packs of 6 carrot sticks.

$2 \times (2 \times 3) = 2 \times 6 = 12$
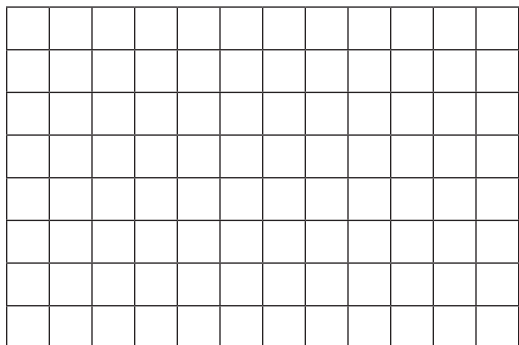
1. $3 \times 2 \times 2 = ?$

_____ × _____ = _____

_____ × _____ = _____

2. $4 \times 2 \times 4 = ?$

_____ × _____ = _____

_____ × _____ = _____

Name _____

3. $5 \times 2 \times 2 = ?$

_____ × _____ = _____

_____ × _____ = _____

Rewrite the expression two ways.

4. $4 \times 4 \times 2 =$ _____ × _____

= _____ × _____

5. $3 \times 4 \times 2 =$ _____ × _____

= _____ × _____

Write an expression for the situation. Use parentheses.

6. Your teacher has 2 cases of pencils. Each case has 4 boxes of 6 pencils. How many pencils does your teacher have? Find the number of pencils in each case first.
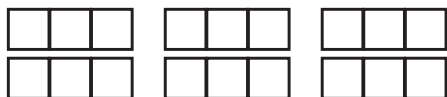
_____

Write a situation for the expression.

7. $(3 \times 2) \times 5$

_____

_____

Name _____

Use Color Tiles to build the model.
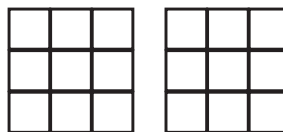## Use the model to complete the number sentence.

1. $(2 \times 3) \times 3$

_____ × 3 = _____
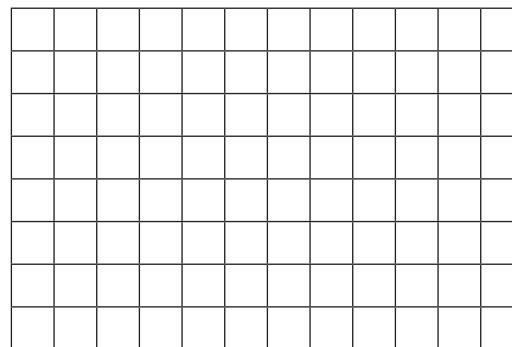
2. $2 \times (3 \times 3)$

2 × _____ = _____

Use Color Tiles to build two different models for the problem.
Draw each model, and use it to write a number sentence.

3. $4 \times 2 \times 3 = ?$

$8 \times 3 = 24$

$4 \times 6 =$ _____

4. $2 \times 2 \times 4 = ?$

_____ × _____ = _____

_____ × _____ = _____

5. $3 \times 2 \times 5 = ?$

_____ × _____ = _____

_____ × _____ = _____

Rewrite the expression two ways.

6. $2 \times 2 \times 5 =$ _____ × _____

    = _____ × _____

7. $2 \times 4 \times 4 =$ _____ × _____

    = _____ × _____

3

Complete each addition table.

a.

+	☐	☐
3	11	13
4	☐	☐

b.

+	2	☐
☐	☐	5
5	7	9

c.

+	3	9
☐	5	☐
☐	8	☐

Name _____

Try This

Andrea has 4 boxes of pencils. Each box contains 7 pencils. How many pencils are there in all? Show how to make an easier problem.
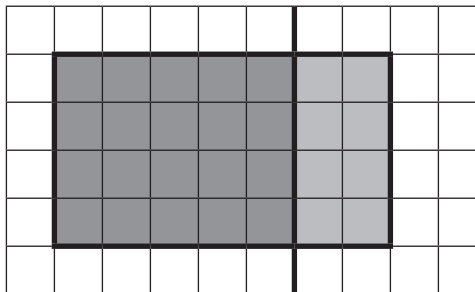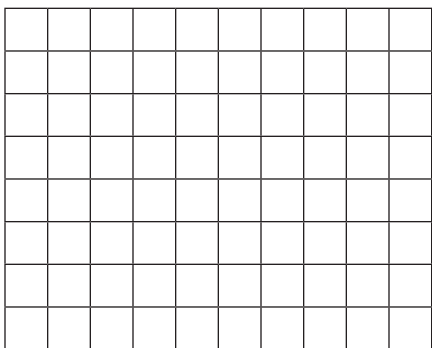
- Use Color Tiles to build an array for the problem.

- Draw your array on the grid.

- Show the parts by drawing a line.

- Complete the number sentences.

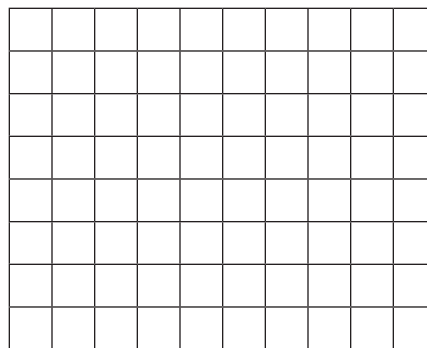$4 \times 7 = 4 \times (5 + 2) = 28$

$(4 \times 5) + (4 \times 2) = 20 + 8$

1. $4 \times 8 = 4 \times (\underline{\hspace{1cm}} + \underline{\hspace{1cm}}) = \underline{\hspace{1cm}}$

$(\underline{\hspace{0.5cm}} \times \underline{\hspace{0.5cm}}) + (\underline{\hspace{0.5cm}} \times \underline{\hspace{0.5cm}}) = \underline{\hspace{0.5cm}} + \underline{\hspace{0.5cm}}$

2. $5 \times 7 = 5 \times (\underline{\hspace{1cm}} + \underline{\hspace{1cm}}) = \underline{\hspace{1cm}}$

$(\underline{\hspace{0.5cm}} \times \underline{\hspace{0.5cm}}) + (\underline{\hspace{0.5cm}} \times \underline{\hspace{0.5cm}}) = \underline{\hspace{0.5cm}} + \underline{\hspace{0.5cm}}$

3. $6 \times 7 = 6 \times (\underline{\hspace{1cm}} + \underline{\hspace{1cm}}) = \underline{\hspace{1cm}}$

$(\underline{\hspace{0.5cm}} \times \underline{\hspace{0.5cm}}) + (\underline{\hspace{0.5cm}} \times \underline{\hspace{0.5cm}}) = \underline{\hspace{0.5cm}} + \underline{\hspace{0.5cm}}$

4. $5 \times 9 = 5 \times (\underline{\hspace{1cm}} + \underline{\hspace{1cm}}) = \underline{\hspace{1cm}}$

$(\underline{\hspace{0.5cm}} \times \underline{\hspace{0.5cm}}) + (\underline{\hspace{0.5cm}} \times \underline{\hspace{0.5cm}}) = \underline{\hspace{0.5cm}} + \underline{\hspace{0.5cm}}$

© ETA hand2mind®

Name _____

Complete the number sentence.

5. $6 \times (5 + 4) = (\underline{} \times \underline{}) + (\underline{} \times \underline{})$

6. $8 \times (5 + 1) = (\underline{} \times \underline{}) + (\underline{} \times \underline{})$

7. $\underline{} \times (5 + 5) = (5 \times 5) + (5 \times 5)$

8. $\underline{} \times (5 + 3) = (6 \times 5) + (6 \times 3)$

Solve the problem.

9. Roberta solved 8 math problems every day for 7 days. How many problems did she solve in all?

    $7 \times 8 = 7 \times (\underline{} + \underline{})$

    $= (\underline{} \times \underline{}) + (\underline{} \times \underline{})$

    $= \underline{} + \underline{}$

    $= \underline{}$
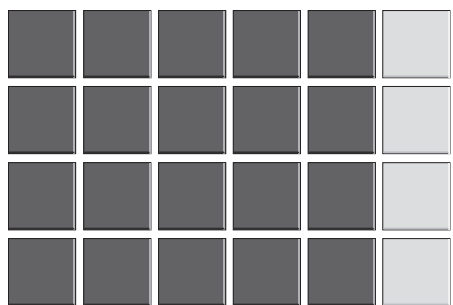
10. The library has 4 rows of tables. There are 9 tables in each row. How many tables are there?

    $4 \times 9 = 4 \times (\underline{} + \underline{})$

    $= (\underline{} \times \underline{}) + (\underline{} \times \underline{})$

    $= \underline{} + \underline{}$

    $= \underline{}$

Name _____

Use Color Tiles to build the model. Write the missing numbers.

1. You had 4 rows of 5 chairs. Then you added a chair to each row. How many chairs do you have now?
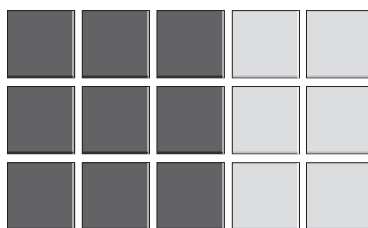
$4 \times (5 + 1) = ?$

$(4 \times 5) + (4 \times 1) =$ _____ + _____

= _____

2. You had 3 groups of 3 books. Then you added 2 books to each group. How many books do you have now?

$3 \times (3 + 2) = ?$

(_____ × _____) + (_____ × _____)
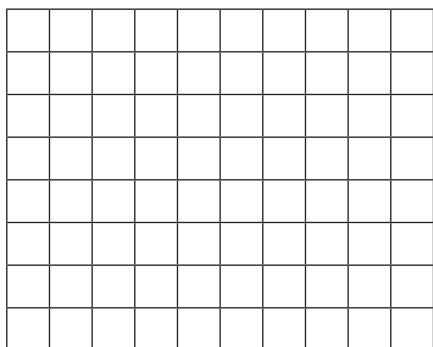
= _____ + _____ = _____

Use Color Tiles to model the problem. Draw your model on the grid. Write the missing numbers.

3. $6 \times 8 = 6 \times (5 +$ _____$)$

(_____ × _____) + (_____ × _____)

= _____ + _____ = _____

4. $4 \times 9 = 4 \times ($_____ + _____$)$

(_____ × _____) + (_____ × _____)

= _____ + _____ = _____

Complete the number sentence.

5. $3 \times (5 + 1)$

= (_____ × _____) + (_____ × _____)

6. $8 \times (5 + 3)$

= (_____ × _____) + (_____ × _____)

7. _____ $\times (4 + 1) = (5 \times 4) + (5 \times 1)$

8. _____ $\times (5 + 4) = (6 \times 5) + (6 \times 4)$

4

Here are 3 number cards.

| **1** | **4** | **7** |

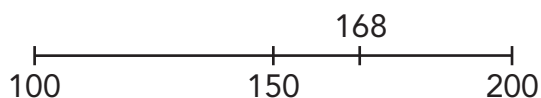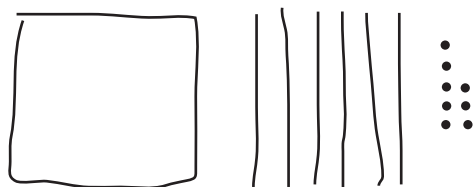Use them all to make

    a. the biggest number.

    b. the smallest 3-digit number.

    c. the number closest to 500.

Try This

Bethany will take 168 brownies to the Bake Off. Round to the nearest hundred and to the nearest ten.

■ If it helps, use Base Ten Blocks to model the number. Sketch the model.

■ Sketch a number line segment to identify the nearest hundred.

■ Sketch a number line segment to identify the nearest ten.

The nearest hundred is 200.

The nearest ten is 170.

1. The Smiths traveled 337 miles to Florida. Round to the nearest hundred and to the nearest ten.

Nearest hundred: _____ miles   Nearest ten: _____ miles

2. At the school carnival, they ran out of pennies and nickels to make change. So they are rounding prices to the nearest 10¢. What will a 62¢ item cost?

Nearest 10¢: _____ ¢

3. Ruth's house is 276 feet from Gary's yard. Round to the nearest hundred and to the nearest ten.

Nearest hundred: _____ feet   Nearest ten: _____ feet

Solve the problem. Make a sketch if it helps.

4. If you round each number in 83 − 18 to the nearest ten, what will you find for the difference?
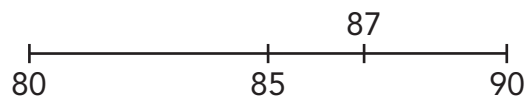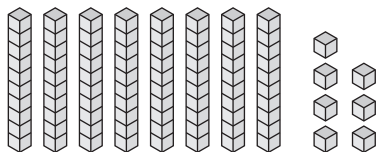
_____

5. I am a number that rounds to 50. What number can I be? Justify your answer.

_____

_____

6. I am a number that rounds to 60. One of my digits is 5. What number am I? Justify your answer.

_____

_____

7. Joel has about 300 baseball cards. Marco has 340 baseball cards. Is it possible for Joel to have more baseball cards than Marco? Justify your answer.

_____

_____

Use Base Ten Blocks to build the model. Use the model and the number line segment to complete the problem.

1. Jackson traveled 87 miles in one day. Round to the nearest ten.

87

80   85   90

Nearest ten: _____ miles

2. Dina rode her new motorcycle 326 miles last weekend. Round to the nearest hundred.

326

300   350   400

Nearest hundred: _____ miles

Use Base Ten Blocks to model the number. Draw your model. Draw and use a number line segment to help you complete the problem.

3. Sanjay took 227 steps from his house to the street. Round to the nearest ten.

Nearest ten: _____ steps

Name _____

4. Sandra took 168 steps from her house to the back fence. Round to the nearest hundred.

Nearest hundred: _____ steps

Solve each problem.

5. Jamie read about 50 books this summer. Michelle read 46 books. Is it possible that Michelle read more books than Jamie? Justify your answer.

_____

6. I am a number that rounds to 100. What can I be? Justify your answer.

_____

7. At Saturday's football game, four players gained yards carrying the ball. Raj gained 78, Brad gained 72, Derek gained 68, and Steve gained 88. If the coach rounds to the nearest 10 yards, which player's yardage will be rounded to 80 yards?

_____

5

Suzanne builds stools (3 legs) and tables (5 legs). She counted 34 legs total. Is this possible or not? Explain your answer.
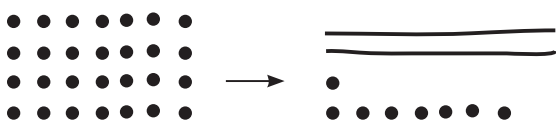
Try This

Ahmad bought 4 bags of apples. Each bag held 7 apples. He gave 11 of the apples away. How many did he keep?

- Estimate the answer.
- Use Base Ten Blocks to model each step of the problem, and draw each model.
- Write an equation for each step.

Think, 4 bags of (5 + 2) apples is 20 + 8 apples, which is 28, or about 30. Ahmad gave away 11 apples, which is about 10.

Estimate: 30 − 10 = 20.
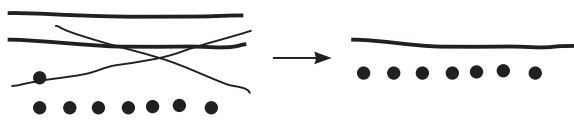
Step 1:

Equation: 4 × 7 = 28

Step 2:

Equation: 28 − 11 = 17

---

1. Joe has 9 books. His sister has 2 times as many books. How many books do they have together?

Estimate: _____

Step 1   Equation: _____

Step 2   Equation: _____

Name _____

2.   Jack purchased 18 trading cards on Monday and 27 on Tuesday. Each trading card sheet holds 9 cards. How many sheets does he need to hold all his cards?

Estimate: _____

Step 1   Equation: _____

Step 2   Equation: _____

3.   Tia made 24 cupcakes. Then she realized she did not have enough for the party. She made 2 batches of 8 cupcakes each. How many cupcakes did she have?

Estimate: _____

Step 1   Equation: _____

Step 2   Equation: _____

Name _____

4. Carson made 45 paper footballs. He kept 20 of them. He shared what was left equally with his five friends. How many paper footballs did each friend get?

Estimate: _____

Step 1   Equation: _____

Step 2   Equation: _____

5. Colin purchased 5 boxes of paper airplanes. Each box has 4 paper airplanes. He gave 8 paper airplanes to his brother. How many did Collin keep?

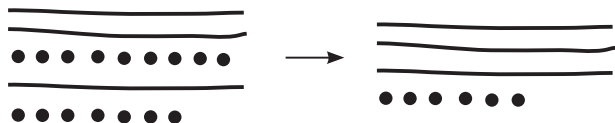Estimate: _____

Step 1   Equation: _____

Step 2   Equation: _____

Name _____

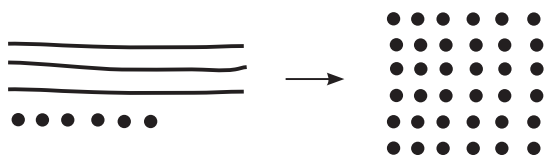**Use Base Ten Blocks to build the models. Use the models to complete the problem.**

1. Sally and Shelly like to make charm bracelets. Sally has 19 charms. Shelly has 17 charms. They have 6 bracelets. How many charms are on each bracelet?

   Estimate: (Example) 20 + 20 = 40; 40 ÷ 5 = 8

   Step 1   Equation: 19 + 17 = _____

   Step 2   Equation: 36 ÷ 6 = _____

Using Base Ten Blocks, build models for each step in the problem. Draw your models. Use your models to complete the problem.

2. Mrs. Abel bought 24 pencils and 14 erasers for her class. She gave 17 pencils and erasers to her students. She kept the rest. How many items did she keep?

   Estimate: _____

   Step 1   Equation: _____

   Step 2   Equation: _____

3. Ben and Zach like to collect rocks. Ben purchased 3 boxes of rocks. Each box holds 8 rocks. Ben gave Zach 12 of the rocks. How many rocks does Ben have left?

Estimate: _____

Step 1   Equation: _____

Step 2   Equation: _____

4. Allie and Alison each made 24 cookies. They need to put them in boxes for the bake sale. Each box can hold 6 cookies. How many boxes will they need?

Estimate: _____

Step 1   Equation: _____

Step 2   Equation: _____