

Name _____

Date _____

1. Draw an array that shows 6 rows of 3.

2. Draw an array that shows 3 rows of 6.

3. Write multiplication expressions for the arrays in Problems 1 and 2. Let the first factor in each expression represent the number of rows. Use the commutative property to make sure the equation below is true.

$$\begin{array}{c} \underline{\hspace{2cm}} \times \underline{\hspace{2cm}} = \underline{\hspace{2cm}} \times \underline{\hspace{2cm}} \\ \text{Problem 1} \qquad \qquad \text{Problem 2} \end{array}$$

4. Write a multiplication sentence for each expression. You might skip-count to find the totals. The first one is done for you.

a. 5 threes: $5 \times 3 = 15$ d. 3 sixes: _____ g. 8 threes: _____

b. 3 fives: _____ e. 7 threes: _____ h. 3 nines: _____

c. 6 threes: _____ f. 3 sevens: _____ i. 10 threes: _____

5. Find the unknowns that make the equations true. Then, draw a line to match related facts.

a. $3 + 3 + 3 + 3 + 3 + 3 =$ _____

d. $3 \times 9 =$ _____

b. $3 \times 5 =$ _____

e. _____ $= 6 \times 3$

c. $8 \text{ threes} + 1 \text{ three} =$ _____

f. $15 = 5 \times$ _____

6. Fernando puts 3 pictures on each page of his photo album. He puts pictures on 8 pages.
- Use circles to draw an array that represents the total number of pictures in Fernando's photo album.
 - Use your array to write and solve a multiplication sentence to find Fernando's total number of pictures.
 - Fernando adds 2 more pages to his book. He puts 3 pictures on each new page. Draw x's to show the new pictures on the array in Part (a).
 - Write and solve a multiplication sentence to find the new total number of pictures in Fernando's album.
7. Ivania recycles. She gets 3 cents for every can she recycles.
- How much money does Ivania make if she recycles 4 cans?
 $\underline{\hspace{2cm}} \times \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$ cents
 - How much money does Ivania make if she recycles 7 cans?
 $\underline{\hspace{2cm}} \times \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$ cents