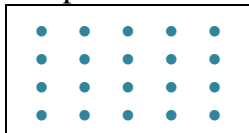


4.OA.A.2 Relating Operations

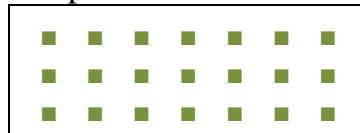
4.OA.A.2: Multiply or divide to solve word problems involving multiplicative comparison.

1. Make groups as directed and write the related subtraction and division sentence.

a. Groups of Five



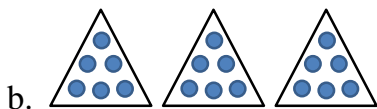
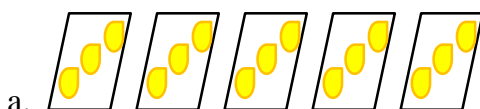
b. Groups of Three



Solution:

a. _____ b. _____

2. Write the related addition and multiplication sentence.



Solution:

a. _____

 b. _____

3. Write the related multiplication or division sentence.

- a. $12 - 3 - 3 - 3 - 3 = 0$
 b. $4 + 4 + 4 + 4 + 4 = 20$
 c. $27 - 9 - 9 - 9 = 0$
 d. $7 + 7 = 14$

Solution:

a. _____
 b. _____
 c. _____
 d. _____

- e. 4 groups of 3 is 12
 f. $6 + 6 + 6 + 6 = 24$
 g. $48 - 12 - 12 - 12 - 12 = 0$
 h. $54 - 9 - 9 - 9 - 9 - 9 - 9 = 0$

Solution:

e. _____
 f. _____
 g. _____
 h. _____

4. A pencil case can hold 10 pencils. A box of pencil cases can hold 10 pencil cases. The box already has 4 pencil cases. How many more pencils can fit in the box of pencil cases?

Solution:

5. A box of gloves contains 4 pairs and it costs \$8. Cristina wants to buy gloves for \$40. How many pairs of gloves can she get with \$40?

Solution:

6. Draw a picture to prove that $2 \times 5 = 5 \times 2$

Solution:

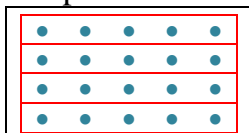
4.OA.A.2 Relating Operations

4.OA.A.2: Multiply or divide to solve word problems involving multiplicative comparison.

Answer Key

1. Make groups as directed and write the related subtraction and division sentence.

a. Groups of Five



b. Groups of Three

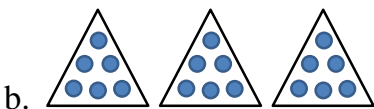
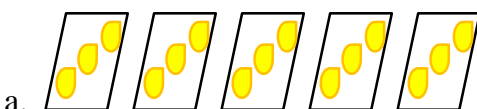


Solution:

$$\begin{array}{l} \text{a. } 20 - 5 - 5 - 5 - 5 = 0 \\ \quad 20 \div 5 = 4 \end{array}$$

$$\begin{array}{l} \text{b. } 21 - 3 - 3 - 3 - 3 - 3 - 3 - 3 = 0 \\ \quad 21 \div 3 = 7 \end{array}$$

2. Write the related addition and multiplication sentence.



Solution:

$$\begin{array}{l} \text{a. } 3 + 3 + 3 + 3 + 3 = 15 \\ \quad 5 \times 3 = 15 \end{array}$$

$$\begin{array}{l} \text{b. } 6 + 6 + 6 = 18 \\ \quad 3 \times 6 = 18 \end{array}$$

3. Write the related multiplication or division sentence.

- a. $12 - 3 - 3 - 3 - 3 = 0$
- b. $4 + 4 + 4 + 4 + 4 = 20$
- c. $27 - 9 - 9 - 9 = 0$
- d. $7 + 7 = 14$

Solution:

- a. $12 \div 3 = 4$
- b. $5 \times 4 = 20$
- c. $27 \div 9 = 3$
- d. $2 \times 7 = 14$

- e. 4 groups of 3 is 12
- f. $6 + 6 + 6 + 6 = 24$
- g. $48 - 12 - 12 - 12 - 12 = 0$
- h. $54 - 9 - 9 - 9 - 9 - 9 - 9 = 0$

Solution:

- e. $4 \times 3 = 12$
- f. $4 \times 6 = 24$
- g. $48 \div 12 = 4$
- h. $54 \div 9 = 6$

4. A pencil case can hold 10 pencils. A box of pencil cases can hold 10 pencil cases. The box already has 4 pencil cases. How many more pencils can fit in the box of pencil cases?

Solution:

$$\begin{array}{l} 10 \times 10 = 100; 4 \times 10 = 40 \\ 100 - 40 = 60 \text{ pencils} \end{array}$$

5. A box of gloves contains 4 pairs and it costs \$8. Cristina wants to buy gloves for \$40. How many pairs of gloves can she get with \$40?

Solution:

$$\begin{array}{l} \$40 \div \$8 = 5 \\ 5 \times 4 = 20 \text{ pairs} \end{array}$$

6. Draw a picture to prove that $2 \times 5 = 5 \times 2$

Solution:

