

Rewrite addition problems using greatest common factors and the distributive property to create equivalent expressions.

Practice Set A

Name:

Date:

1. Complete the following tasks with the expression $30+36$.

a. Find the common factors of 30 and 36. Explain the method you used to find the common factors.

b. Fill in the number sentence using the greatest common factor:

$$30 + 36 = (_) \times (_ + _)$$

c. Write two other number sentences using other common factors:

$$30 + 36 = (_) \times (_ + _)$$

$$30 + 36 = (_) \times (_ + _)$$

2. Complete the following tasks with the expression $24+16$.

a. Find the common factors of 24 and 16. Explain the method you used to find the common factors.

b. Fill in the number sentence using the greatest common factor:

$$24 + 16 = (_) \times (_ + _)$$

c. Write two other number sentences using other common factors:

$$24 + 16 = (_) \times (_ + _)$$

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Rewrite addition problems using greatest common factors and the distributive property to create equivalent expressions.

Practice Set A Answer Key

1. Complete the following tasks with the expression $30+36$.

a. Find the common factors of 30 and 36. Explain the method you used to find the common factors.

The common factors of 30 and 36 are 1, 2, 3, and 6.

Any method for finding the common factors of 30 and 36 are acceptable as long as the method is explained.

b. Fill in the number sentence using the greatest common factor:

$$30 + 36 = (6) \times (5+6)$$

c. Write two other number sentences using other common factors:

$$30 + 36 = (3) \times (10+12)$$

$$30 + 36 = (2) \times (15+18)$$

The number sentence $(1) \times (30 + 36)$ could also be used.

2. Complete the following tasks with the expression $24+16$.

a. Find the common factors of 24 and 16. Explain the method you used to find the common factors.

The common factors of 24 and 16 are 1, 2, 4, and 8.

Any method for finding the common factors of 24 and 16 are acceptable as long as the method is explained.

b. Fill in the number sentence using the greatest common factor:

$$24 + 16 = (8) \times (3+2)$$

c. Write two other number sentences using other common factors:

$$24 + 16 = (4) \times (6+4)$$

$$24 + 16 = (2) \times (12+8)$$

The number sentence $(1) \times (24 + 16)$ could also be used.