

7th Grade Remote Learning Lesson 3: Subtracting Integers

Subtract positive integers.

Example

$$12 - 15$$

$$12 - 15 = 12 + (-15) \quad \text{Rewrite subtraction as adding the opposite.}$$

Using absolute values,

$$|-15| - |12| = 15 - 12 \quad \text{Subtract the absolute values, because the addends have different signs.}$$
$$= 3 \quad \text{Simplify.}$$

$$12 - 15 = 12 + (-15)$$
$$= -3 \quad \text{Use a negative sign, because } -15 \text{ has a greater absolute value.}$$

Evaluate each expression.

1. $18 - 32$

2. $15 - 27$

Subtract negative integers.

Example

a) $23 - (-6)$

$$23 - (-6) = 23 + 6 \quad \text{Rewrite subtraction as adding the opposite.}$$
$$= 29 \quad \text{Add.}$$

b) $-12 - (-28)$

$$-12 - (-28) = -12 + 28 \quad \text{Rewrite subtraction as adding the opposite.}$$

Using absolute values,

$$|-28| - |-12| = 28 - 12 \quad \text{Subtract the absolute values.}$$
$$= 16 \quad \text{Simplify.}$$

$$-12 - (-28) = -12 + 28$$
$$= 16 \quad \text{Use a positive sign, because } -28 \text{ has a greater absolute value.}$$

Evaluate each expression.

1. $17 - (-6)$

2. $-19 - (-11)$

ADDING AND SUBTRACTING INTEGERS

Directions: Using the digits 1 to 6, at most one time each, fill in the boxes so that top two equations are equal and the bottom equation has the greatest value.

$$\square + \square =$$

$$\square - \square =$$

$$\square - \square =$$