

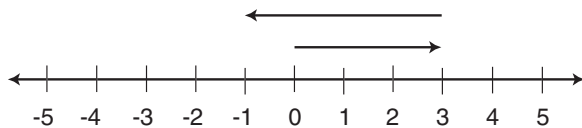
# Adding Integers

You can use a number line or rules to add integers. On a number line, start at 0. Move right to add a positive number. Move left to add a negative number.

## Add two integers with different signs.

Find  $3 + (-4)$ .

Start at 0. Move 3 units to the right. Then move 4 units to the left.



$$3 + (-4) = -1$$

Find the absolute value for each addend.

$$|-4| = 4 \text{ and } |3| = 3$$

Subtract the smaller absolute value from the greater:  $4 - 3 = 1$

Give the difference the same sign as the addend with the greater absolute value. Because  $+4$  has the greater absolute value ( $4 > 3$ ), this difference receives a negative sign.

$$3 + (-4) = -1$$

## Add two integers with the same sign.

Find  $-1 + (-2)$ .

Start at 0. Move 1 unit to the left. Then move 2 more units to the left.



$$-1 + (-2) = -3$$

Find the absolute value for each addend.

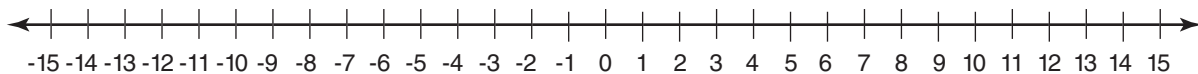
$$|-1| = 1 \text{ and } |-2| = 2$$

Add the absolute values.  $1 + 2 = 3$

Give the sum the same sign as the addends.

$$-1 + (-2) = -3$$

Find each sum. Use the number line or rules.



1. Find  $-5 + 7$ .

Move *left* \_\_\_\_\_ spaces. Move *right* \_\_\_\_\_ spaces. So,  $-5 + 7 =$  \_\_\_\_\_

2.  $8 + 4 =$  \_\_\_\_\_

3.  $3 + (-5) =$  \_\_\_\_\_

4.  $-7 + (-8) =$  \_\_\_\_\_

5.  $-4 + (-4) =$  \_\_\_\_\_

6.  $-5 + 3 =$  \_\_\_\_\_

7.  $7 + (-3) =$  \_\_\_\_\_

8.  $10 + (-1) =$  \_\_\_\_\_

9.  $-8 + 6 =$  \_\_\_\_\_

10.  $2 + (-3) =$  \_\_\_\_\_

11.  $11 + 3 =$  \_\_\_\_\_

12.  $-9 + 6 =$  \_\_\_\_\_

13.  $-2 + 12 =$  \_\_\_\_\_

14. **Algebra** The rule is Add  $-5$ . The input is 10. What is the output? \_\_\_\_\_