

Adding Integers

You can use the rules below to add integers.

Adding two integers with the same sign

Find $-7 + (-3)$.

Step 1: Find the sum of the absolute values of the two numbers.

$$|-7| = 7$$

$$|-3| = 3$$

$$7 + 3 = 10$$

Step 2: Give the sum the same sign as the addends.

Because -7 and -3 both have negative signs, the sum receives a negative sign.

$$\text{So, } -7 + (-3) = -10.$$

Adding two integers with different signs

Find $2 + (-6)$.

Step 1: Find the difference of the absolute values of the two numbers.

$$|-6| - |2| = 4$$

Step 2: Give the difference the same sign as the addend with the greater absolute value.

Because -6 has the greater absolute value, the difference receives a negative sign.

$$\text{So, } 2 + (-6) = -4.$$

Find each sum.

1. $3 + 10 =$ _____

2. $4 + (-6) =$ _____

3. $(-3) + (-5) =$ _____

4. $9 + (-2) + 1 =$ _____

5. $9 + (-8) =$ _____

6. $(-6) + (-5) =$ _____

7. $13 + (-22) =$ _____

8. $30 + (-16) + 5 =$ _____

9. **Algebra** The rule is Add -8 . The input is 9.
What is the output? _____

Adding Integers

1. Draw a number line to find $3 + (-4)$. _____

Draw a number line or use the rules for adding integers to find each sum.

2. $4 + (-12) =$ _____

3. $-12 + (-14) =$ _____

4. $10 + (-1) =$ _____

5. $-2 + (-1) =$ _____

6. $-50 + (-1) =$ _____

7. $8 + (-4) =$ _____

8. $-9 + 7 =$ _____

9. $-3 + (-6) =$ _____

Algebra Use the rule to complete each table.

10. **Rule: Add -6**

Input	Output
5	
3	
-1	

11. **Rule: Add 2**

Input	Output
-7	
-4	
0	

Test Prep

12. Which is the sum of $-6 + (-9) + (-9)$?

A. -24

B. -12

C. -6

D. 24

13. **Writing in Math** Explain how you would solve $-4 + 4 + 5$.
