Topic: Adding and subtracting signed numbers

Question: Simplify the expression.

$$-1 + 8$$

Answer choices:

- $\mathbf{A} = -7$
- B -9
- **C** 7
- D 9

Solution: C

We can rewrite the expression and solve it.

$$-1 + 8$$

$$8 - 1$$

7

We can also find the answer on the number line. Given -1 + 8, we'd start at -1 on the number line, which is one unit to the left of 0. Then, because we're asked to add 8 to -1, we'll move eight units to the right of -1, ending up at 7.



Topic: Adding and subtracting signed numbers

Question: Which equation is the same?

$$3 - 3 = 0$$

Answer choices:

A
$$3 + 3 = 0$$

B
$$3 - (-3) = 0$$

C
$$3 + (-3) = 0$$

$$D \qquad 3 + \left[-(-3) \right] = 0$$

Solution: C

Subtraction is the same as addition of a negative.

$$3 + (-3) = 0$$

$$3 - 3 = 0$$

$$0 = 0$$

Topic: Adding and subtracting signed numbers

Question: Which of these is true?

Answer choices:

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

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

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

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

Solution: B

Subtraction is the same as addition of a negative.

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

$$3 - 2 = 1$$

$$1 = 1$$