Topic: Multiplying signed numbers

Question: Simplify the expression.

$$-3 \cdot 4$$

Answer choices:

A 12

B -12

C 7

D -1

Solution: B

Whenever we multiply two numbers where one number is positive and the other is negative, we'll get a negative answer. We know that $3 \cdot 4 = 12$, and since one of our numbers is negative and the other is positive, we know that $-3 \cdot 4 = -12$.



Topic: Multiplying signed numbers

Question: Which of these is true?

Answer choices:

$$\mathsf{A} \qquad 5 \cdot 2 = 7$$

B
$$-5 \cdot 2 = -10$$

C
$$5 \cdot (-2) = 10$$

D
$$-5 \cdot (-2) = -10$$

Solution: B

Multiplying two numbers together that have the same sign will always result in a positive number. Multiplying two numbers together that have different signs will always result in a negative number.

$$-5 \cdot 2 = -10$$

$$-10 = -10$$



Topic: Multiplying signed numbers

Question: Simplify the expression.

$$-3 \cdot 2$$

Answer choices:

A 5

B -5

C 6

D -6

Solution: D

Whenever we multiply two numbers together where one number is positive and the other is negative, we'll get a negative answer. We know that $3 \cdot 2 = 6$, and since one of our numbers is negative and the other is positive, we know the answer is $-3 \cdot 2 = -6$.

