

## Multiplying Exponents (C)

Simplify each expression.

1.  $(-6)^9 \cdot (-6)^9$

2.  $4^1 \cdot 4^9$

3.  $2^8 \cdot 2^2$

4.  $6^3 \cdot 6^4$

5.  $(-9)^3 \cdot (-9)^4$

6.  $3^2 \cdot 3^3$

7.  $(-3)^{-6} \cdot (-3)^6$

8.  $9^{-5} \cdot 9^8$

9.  $(-5)^2 \cdot (-5)^{-3}$

10.  $9^2 \cdot 9^9$

## Multiplying Exponents (C) Answers

Simplify each expression.

1.  $(-6)^9 \cdot (-6)^9$

$$= (-6)^{18}$$

2.  $4^1 \cdot 4^9$

$$= 4^{10}$$

3.  $2^8 \cdot 2^2$

$$= 2^{10}$$

4.  $6^3 \cdot 6^4$

$$= 6^7$$

5.  $(-9)^3 \cdot (-9)^4$

$$= (-9)^7$$

6.  $3^2 \cdot 3^3$

$$= 3^5$$

7.  $(-3)^{-6} \cdot (-3)^6$

$$= (-3)^0 = 1$$

8.  $9^{-5} \cdot 9^8$

$$= 9^3$$

9.  $(-5)^2 \cdot (-5)^{-3}$

$$= (-5)^{-1} = \frac{1}{-5}$$

10.  $9^2 \cdot 9^9$

$$= 9^{11}$$