

# Multiplying Exponents (A)

Simplify each expression.

1.  $4^{-2} \cdot 4^{-1}$

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

3.  $2^{-1} \cdot 2^{-7}$

4.  $(-5)^6 \cdot (-5)^{-2}$

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

6.  $(-8)^{-1} \cdot (-8)^5$

7.  $7^1 \cdot 7^8$

8.  $7^0 \cdot 7^{-9}$

9.  $4^{-5} \cdot 4^2$

10.  $(-4)^{-4} \cdot (-4)^{-1}$

# Multiplying Exponents (A) Answers

Simplify each expression.

1.  $4^{-2} \cdot 4^{-1}$

$$= 4^{-3} = \frac{1}{4^3}$$

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

$$= (-9)^0 = 1$$

3.  $2^{-1} \cdot 2^{-7}$

$$= 2^{-8} = \frac{1}{2^8}$$

4.  $(-5)^6 \cdot (-5)^{-2}$

$$= (-5)^4$$

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

$$= (-3)^8$$

6.  $(-8)^{-1} \cdot (-8)^5$

$$= (-8)^4$$

7.  $7^1 \cdot 7^8$

$$= 7^9$$

8.  $7^0 \cdot 7^{-9}$

$$= 7^{-9} = \frac{1}{7^9}$$

9.  $4^{-5} \cdot 4^2$

$$= 4^{-3} = \frac{1}{4^3}$$

10.  $(-4)^{-4} \cdot (-4)^{-1}$

$$= (-4)^{-5} = \frac{1}{(-4)^5}$$