

Multiplying Exponents (J)

Simplify each expression.

1. $(-5)^{-3} \cdot (-5)^{-8}$

2. $9^{-9} \cdot 9^1$

3. $2^5 \cdot 2^{-7}$

4. $(-5)^{-4} \cdot (-5)^3$

5. $3^7 \cdot 3^2$

6. $(-4)^1 \cdot (-4)^8$

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

8. $(-2)^{-4} \cdot (-2)^0$

9. $(-9)^6 \cdot (-9)^{-6}$

10. $(-5)^{-4} \cdot (-5)^4$

Multiplying Exponents (J) Answers

Simplify each expression.

1. $(-5)^{-3} \cdot (-5)^{-8}$

$$= (-5)^{-11} = \frac{1}{(-5)^{11}}$$

2. $9^{-9} \cdot 9^1$

$$= 9^{-8} = \frac{1}{9^8}$$

3. $2^5 \cdot 2^{-7}$

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

4. $(-5)^{-4} \cdot (-5)^3$

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

5. $3^7 \cdot 3^2$

$$= 3^9$$

6. $(-4)^1 \cdot (-4)^8$

$$= (-4)^9$$

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

$$= (-7)^0 = 1$$

8. $(-2)^{-4} \cdot (-2)^0$

$$= (-2)^{-4} = \frac{1}{(-2)^4}$$

9. $(-9)^6 \cdot (-9)^{-6}$

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

10. $(-5)^{-4} \cdot (-5)^4$

$$= (-5)^0 = 1$$