

Multiplying Exponents (J)

Simplify each expression.

1. $8^3 \cdot (-8)^3$

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

3. $(-2)^{-8} \cdot (-3)^{-8}$

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

5. $6^{-7} \cdot (-9)^{-7}$

6. $(-3)^{-7} \cdot 5^{-7}$

7. $(-3)^2 \cdot 9^2$

8. $5^{-7} \cdot 8^{-7}$

9. $(-6)^2 \cdot 4^2$

10. $(-8)^{-1} \cdot (-3)^{-1}$

Multiplying Exponents (J) Answers

Simplify each expression.

1. $8^3 \cdot (-8)^3$

$$= (-64)^3$$

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

$$= (-36)^{-6} = \frac{1}{(-36)^6}$$

3. $(-2)^{-8} \cdot (-3)^{-8}$

$$= 6^{-8} = \frac{1}{6^8}$$

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

$$= (-20)^4$$

5. $6^{-7} \cdot (-9)^{-7}$

$$= (-54)^{-7} = \frac{1}{(-54)^7}$$

6. $(-3)^{-7} \cdot 5^{-7}$

$$= (-15)^{-7} = \frac{1}{(-15)^7}$$

7. $(-3)^2 \cdot 9^2$

$$= (-27)^2$$

8. $5^{-7} \cdot 8^{-7}$

$$= 40^{-7} = \frac{1}{40^7}$$

9. $(-6)^2 \cdot 4^2$

$$= (-24)^2$$

10. $(-8)^{-1} \cdot (-3)^{-1}$

$$= 24^{-1} = \frac{1}{24}$$