

Multiplying Exponents (F)

Simplify each expression.

1. $3^{-9} \cdot 3^1$

2. $6^7 \cdot 6^{-5}$

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

4. $7^{-1} \cdot 7^{-6}$

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

6. $(-5)^{-4} \cdot (-5)^0$

7. $8^{-5} \cdot 8^1$

8. $8^3 \cdot 8^5$

9. $3^{-6} \cdot 3^{-2}$

10. $(-4)^{-3} \cdot (-4)^0$

Multiplying Exponents (F) Answers

Simplify each expression.

1. $3^{-9} \cdot 3^1$

$$= 3^{-8} = \frac{1}{3^8}$$

2. $6^7 \cdot 6^{-5}$

$$= 6^2$$

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

$$= 3^6$$

4. $7^{-1} \cdot 7^{-6}$

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

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

$$= (-8)^5$$

6. $(-5)^{-4} \cdot (-5)^0$

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

7. $8^{-5} \cdot 8^1$

$$= 8^{-4} = \frac{1}{8^4}$$

8. $8^3 \cdot 8^5$

$$= 8^8$$

9. $3^{-6} \cdot 3^{-2}$

$$= 3^{-8} = \frac{1}{3^8}$$

10. $(-4)^{-3} \cdot (-4)^0$

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