



Solve each problem using the laws of exponents.

Answers

1) $2^{-4} =$ _____ $=$ _____

1. _____

2) $(3^4)^2 =$ _____ $=$ _____

2. _____

3) $2^2 \times 2^{-3} =$ _____ $=$ _____

3. _____

4) $3^{-4} \times 3^2 =$ _____ $=$ _____

4. _____

5) $(\frac{1}{2})^2 =$ _____ $=$ _____

5. _____

6) $2^1 =$ _____ $=$ _____

6. _____

7) $3^0 =$ _____ $=$ _____

7. _____

8) $3^0 =$ _____ $=$ _____

8. _____

9) $(3 \times 2)^2 =$ _____ $=$ _____

9. _____

10) $3^3 \times 3^4 =$ _____ $=$ _____

10. _____



Solve each problem using the laws of exponents.

1) $2^{-4} = \frac{1}{2^4} = \frac{1}{16}$

2) $(3^4)^2 = 3^{4 \times 2} = 6,561$

3) $2^2 \times 2^{-3} = 2^{2-3} = \frac{1}{2}$

4) $3^{-4} \times 3^2 = 3^{-4+2} = \frac{1}{9}$

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

6) $2^1 = 2 = 2$

7) $3^0 = 1 = 1$

8) $3^0 = 1 = 1$

9) $(3 \times 2)^2 = 3^2 \times 2^2 = 36$

10) $3^3 \times 3^4 = 3^{3+4} = 2,187$

Answers

1. $\frac{1}{16}$

2. **6,561**

3. $\frac{1}{2}$

4. $\frac{1}{9}$

5. $\frac{1}{4}$

6. **2**

7. **1**

8. **1**

9. **36**

10. **2,187**