



Solve each problem using the laws of exponents.

Answers

1) $(3^4)^2 =$ _____ $=$ _____

1. _____

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

2. _____

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

3. _____

4. _____

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

5. _____

6. _____

5) $3^1 =$ _____ $=$ _____

7. _____

8. _____

6) $2^0 =$ _____ $=$ _____

9. _____

10. _____

7) $2^1 =$ _____ $=$ _____

8) $(3^3)^4 =$ _____ $=$ _____

9) $3^2 \times 3^{-3} =$ _____ $=$ _____

10) $2^2 \times 2^4 =$ _____ $=$ _____



Solve each problem using the laws of exponents.

1) $(3^4)^2 = 3^{4 \times 2} = 6,561$

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

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

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

5) $3^1 = 3 = 3$

6) $2^0 = 1 = 1$

7) $2^1 = 2 = 2$

8) $(3^3)^4 = 3^{3 \times 4} = 531,441$

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

10) $2^2 \times 2^4 = 2^{2+4} = 64$

Answers

1. **6,561**

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

3. **36**

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

5. **3**

6. **1**

7. **2**

8. **531,441**

9. **$\frac{1}{3}$**

10. **64**