



Solve each problem using the laws of exponents.

Answers

1) $3^2 \times 3^4 =$ _____ $=$ _____

1. _____

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

2. _____

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

3. _____

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

4. _____

5) $(2^2)^4 =$ _____ $=$ _____

5. _____

6) $3^{-2} =$ _____ $=$ _____

6. _____

7) $2^{-2} \times 2^3 =$ _____ $=$ _____

7. _____

8) $3^2 \times 3^3 =$ _____ $=$ _____

8. _____

9) $2^1 =$ _____ $=$ _____

9. _____

10) $3^0 =$ _____ $=$ _____

10. _____



Solve each problem using the laws of exponents.

1) $3^2 \times 3^4 = 3^{2+4} = 729$

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

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

4) $(\frac{1}{3})^3 = \frac{1}{3^3} = \frac{1}{27}$

5) $(2^2)^4 = 2^{2 \times 4} = 256$

6) $3^{-2} = \frac{1}{3^2} = \frac{1}{9}$

7) $2^{-2} \times 2^3 = 2^{-2+3} = 2$

8) $3^2 \times 3^3 = 3^{2+3} = 243$

9) $2^1 = 2 = 2$

10) $3^0 = 1 = 1$

Answers

1. **729**

2. **36**

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

4. **$\frac{1}{27}$**

5. **256**

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

7. **2**

8. **243**

9. **2**

10. **1**