



Solve each problem using the laws of exponents.

1) $3^0 = \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

2) $(3 \times 2)^2 = \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

3) $2^2 \times 2^4 = \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

4) $3^1 = \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

5) $(2^4)^2 = \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

6) $3^{-3} \times 3^2 = \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

7) $3^3 \times 3^{-4} = \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

8) $3^{-4} \times 3^2 = \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

9) $2^{-3} = \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

10) $(\frac{1}{2})^2 = \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

Answers

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

8. _____

9. _____

10. _____



Solve each problem using the laws of exponents.

1) $3^0 = \underline{1} = \underline{1}$

2) $(3 \times 2)^2 = \underline{3^2 \times 2^2} = \underline{36}$

3) $2^2 \times 2^4 = \underline{2^{2+4}} = \underline{64}$

4) $3^1 = \underline{3} = \underline{3}$

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

6) $3^{-3} \times 3^2 = \underline{3^{-3+2}} = \underline{\frac{1}{3}}$

7) $3^3 \times 3^{-4} = \underline{3^{3-4}} = \underline{\frac{1}{3}}$

8) $3^{-4} \times 3^2 = \underline{3^{-4+2}} = \underline{\frac{1}{9}}$

9) $2^{-3} = \underline{\frac{1}{2^3}} = \underline{\frac{1}{8}}$

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

Answers

1. 1

2. 36

3. 64

4. 3

5. 256

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

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

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

9. $\frac{1}{8}$

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