



Solve each problem using the laws of exponents.

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

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

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

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

5) $3^{-2} \times 3^4 = \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

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

7) $2^1 = \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

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

9) $3^3 \times 3^{-4} = \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

10) $3^{-3} = \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

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

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

4) $(\frac{1}{2})^3 = \underline{\frac{1}{2^3}} = \underline{\frac{1}{8}}$

5) $3^{-2} \times 3^4 = \underline{3^{-2+4}} = \underline{9}$

6) $(3^3)^2 = \underline{3^{3 \times 2}} = \underline{729}$

7) $2^1 = \underline{2} = \underline{2}$

8) $2^4 \times 2^2 = \underline{2^{4+2}} = \underline{64}$

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

10) $3^{-3} = \underline{\frac{1}{3^3}} = \underline{\frac{1}{27}}$

Answers

1. $\underline{1}$

2. $\underline{36}$

3. $\underline{2}$

4. $\underline{\frac{1}{8}}$

5. $\underline{9}$

6. $\underline{729}$

7. $\underline{2}$

8. $\underline{64}$

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

10. $\underline{\frac{1}{27}}$