



Solve each problem using the laws of exponents.

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

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

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

4) $3^0 = \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

5) $3^0 = \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

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

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

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

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

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

Answers

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

8. _____

9. _____

10. _____



Solve each problem using the laws of exponents.

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

2) $2^4 \times 2^3 = \underline{2^{4+3}} = \underline{128}$

3) $(3 \times 2)^4 = \underline{3^4 \times 2^4} = \underline{1,296}$

4) $3^0 = \underline{1} = \underline{1}$

5) $3^0 = \underline{1} = \underline{1}$

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

7) $(2^4)^3 = \underline{2^{4 \times 3}} = \underline{4,096}$

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

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

10) $2^1 = \underline{2} = \underline{2}$

Answers

1. $\underline{2}$

2. $\underline{128}$

3. $\underline{1,296}$

4. $\underline{1}$

5. $\underline{1}$

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

7. $\underline{4,096}$

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

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

10. $\underline{2}$