



Solve each problem using the laws of exponents.

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

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

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

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

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

6) $2^2 \times 2^{-4} = \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

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

8) $2^1 = \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

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

10) $2^0 = \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

Answers

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

8. _____

9. _____

10. _____



Solve each problem using the laws of exponents.

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

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

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

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

5) $2^{-2} = \underline{\frac{1}{2^2}} = \underline{\frac{1}{4}}$

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

7) $(2^2)^3 = \underline{2^{2 \times 3}} = \underline{64}$

8) $2^1 = \underline{2} = \underline{2}$

9) $2^4 \times 2^2 = \underline{2^{4+2}} = \underline{64}$

10) $2^0 = \underline{1} = \underline{1}$

Answers

1. $\underline{2}$

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

3. $\underline{36}$

4. $\underline{3}$

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

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

7. $\underline{64}$

8. $\underline{2}$

9. $\underline{64}$

10. $\underline{1}$