



Solve each problem using the laws of exponents.

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

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

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

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

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

6) $3^4 \times 3^3 = \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

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

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

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

10) $2^{-4} \times 2^2 = \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

Answers

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

8. _____

9. _____

10. _____



Solve each problem using the laws of exponents.

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

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

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

4) $(2 \times 3)^3 = \underline{2^3 \times 3^3} = \underline{216}$

5) $(\frac{1}{3})^2 = \underline{\frac{1}{3^2}} = \underline{\frac{1}{9}}$

6) $3^4 \times 3^3 = \underline{3^{4+3}} = \underline{2,187}$

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

8) $2^{-4} = \underline{\frac{1}{2^4}} = \underline{\frac{1}{16}}$

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

10) $2^{-4} \times 2^2 = \underline{2^{-4+2}} = \underline{\frac{1}{4}}$

Answers

1. $\underline{2}$

2. $\underline{64}$

3. $\underline{1}$

4. $\underline{216}$

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

6. $\underline{2,187}$

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

8. $\underline{\frac{1}{16}}$

9. $\underline{9}$

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