



Solve each problem using the laws of exponents.

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

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

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

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

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

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

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

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

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

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

Answers

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

8. _____

9. _____

10. _____



Solve each problem using the laws of exponents.

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

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

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

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

5) $2^2 \times 2^3 = \underline{2^{2+3}} = \underline{32}$

6) $(3 \times 2)^3 = \underline{3^3 \times 2^3} = \underline{216}$

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

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

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

10) $(2^2)^4 = \underline{2^{2 \times 4}} = \underline{256}$

Answers

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

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

3. $\underline{1}$

4. $\underline{3}$

5. $\underline{32}$

6. $\underline{216}$

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

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

9. $\underline{9}$

10. $\underline{256}$