



Solve each problem using the laws of exponents.

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

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

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

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

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

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

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

8) $2^0 = \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

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

10) $2^3 \times 2^4 = \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

Answers

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

8. _____

9. _____

10. _____



Solve each problem using the laws of exponents.

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

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

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

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

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

6) $2^{-4} = \underline{\frac{1}{2^4}} = \underline{\frac{1}{16}}$

7) $(\frac{1}{3})^4 = \underline{\frac{1}{3^4}} = \underline{\frac{1}{81}}$

8) $2^0 = \underline{1} = \underline{1}$

9) $2^3 \times 2^4 = \underline{2^{3+4}} = \underline{128}$

10) $2^3 \times 2^4 = \underline{2^{3+4}} = \underline{128}$

Answers

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

2. $\underline{2}$

3. $\underline{4,096}$

4. $\underline{1,296}$

5. $\underline{3}$

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

7. $\underline{\frac{1}{81}}$

8. $\underline{1}$

9. $\underline{128}$

10. $\underline{128}$