



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.  $\underline{2}$