



Solve each problem using the laws of exponents.

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

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

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

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

5)  $2^{-2} \times 2^4 = \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

6)  $2^1 = \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

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

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

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

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

**Answers**

1. \_\_\_\_\_

2. \_\_\_\_\_

3. \_\_\_\_\_

4. \_\_\_\_\_

5. \_\_\_\_\_

6. \_\_\_\_\_

7. \_\_\_\_\_

8. \_\_\_\_\_

9. \_\_\_\_\_

10. \_\_\_\_\_



Solve each problem using the laws of exponents.

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

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

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

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

5)  $2^{-2} \times 2^4 = \underline{2^{-2+4}} = \underline{4}$

6)  $2^1 = \underline{2} = \underline{2}$

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

8)  $(3^4)^2 = \underline{3^{4 \times 2}} = \underline{6,561}$

9)  $3^{-4} = \underline{\frac{1}{3^4}} = \underline{\frac{1}{81}}$

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

**Answers**

1.  $\underline{1}$

2.  $\underline{2}$

3.  $\underline{36}$

4.  $\underline{128}$

5.  $\underline{4}$

6.  $\underline{2}$

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

8.  $\underline{6,561}$

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

10.  $\underline{2}$