



Solve each problem using the laws of exponents.

**Answers**

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

1.                     

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

2.                     

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

3.                     

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

4.                     

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

5.                     

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

6.                     

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

7.                     

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

8.                     

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

9.                     

10)  $3^1 = \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

10.



Solve each problem using the laws of exponents.

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

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

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

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

5)  $3^2 \times 3^3 = \underline{3^{2+3}} = \underline{243}$

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

7)  $3^{-2} \times 3^4 = \underline{3^{-2+4}} = \underline{9}$

8)  $2^2 \times 2^4 = \underline{2^{2+4}} = \underline{64}$

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

10)  $3^1 = \underline{3} = \underline{3}$

**Answers**

1.  $\underline{1}$

2.  $\underline{216}$

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

4.  $\underline{256}$

5.  $\underline{243}$

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

7.  $\underline{9}$

8.  $\underline{64}$

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

10.  $\underline{3}$