

Solve each problem using the laws of exponents.

Answers

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

1. _____

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

2. _____

3) $3^0 =$ $=$

3. _____

4) $3^3 \times 3^2 =$ $=$

4.

5) $3^{-2} =$ $=$

5.

6) $(3^2)^4 = \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

6.

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

7. _____

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

8.

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

9.

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

10.



Solve each problem using the laws of exponents.

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

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

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

4) $3^3 \times 3^2 = \underline{3^{3+2}} = \underline{243}$

5) $3^{-2} = \underline{\frac{1}{3^2}} = \underline{\frac{1}{9}}$

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

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

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

9) $3^{-3} = \underline{\frac{1}{3^3}} = \underline{\frac{1}{27}}$

10) $3^{-4} \times 3^3 = \underline{3^{-4+3}} = \underline{\frac{1}{3}}$

Answers

1. **1,296**

2. **3**

3. **1**

4. **243**

5. **$\frac{1}{9}$**

6. **6,561**

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

8. **$\frac{1}{2}$**

9. **$\frac{1}{27}$**

10. **$\frac{1}{3}$**