



Solve each problem using the laws of exponents.

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

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

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

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

5) $(3 \times 2)^2 = \underline{3^2 \times 2^2} = \underline{36}$

6) $3^{-3} = \underline{\frac{1}{3^3}} = \underline{\frac{1}{27}}$

7) $(2^2)^3 = \underline{2^{2 \times 3}} = \underline{64}$

8) $2^3 \times 2^4 = \underline{2^{3+4}} = \underline{128}$

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

10) $3^2 \times 3^{-4} = \underline{3^{2-4}} = \underline{\frac{1}{9}}$

Answers

1. $\underline{1}$

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

3. $\underline{3}$

4. $\underline{3}$

5. $\underline{36}$

6. $\underline{\frac{1}{27}}$

7. $\underline{64}$

8. $\underline{128}$

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

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