



Solve each problem using the laws of exponents.

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

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

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

4) $3^0 = \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

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

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

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

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

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

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

Answers

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

8. _____

9. _____

10. _____



Solve each problem using the laws of exponents.

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

2) $3^{-2} \times 3^3 = 3^{-2+3} = 3$

3) $3^0 = 1 = 1$

4) $3^0 = 1 = 1$

5) $2^{-2} = \frac{1}{2^2} = \frac{1}{4}$

6) $2^1 = 2 = 2$

7) $(2 \times 3)^2 = 2^2 \times 3^2 = 36$

8) $3^2 \times 3^3 = 3^{2+3} = 243$

9) $(3^2)^4 = 3^{2 \times 4} = 6,561$

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

Answers

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

2. 3

3. 1

4. 1

5. $\frac{1}{4}$

6. 2

7. 36

8. 243

9. $6,561$

10. 2