Solve each problem using the laws of exponents.

1) $3^2 \times 3^{-4} =$ _____ = _____

2) $2^{-4} =$ _____ = _____

3) $2^0 =$ _____ = _____

4) $3^1 =$ _____ = _____

5) $2^2 \times 2^3 =$ _____ = _____

6) $(3 \times 2)^3 =$ _____ = _____

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

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

9) $3^{-2} \times 3^4 =$ _____ = _____

10) $(2^2)^4 =$ _____ = _____

Answers

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____

1-10	90	80	70	60	50	40	30	20	10	0

Solve each problem using the laws of exponents.

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

2) $2^{-4} =$ $\frac{1}{2^4}$ = $\frac{1}{16}$

3) $2^0 =$ 1 = 1

4) $3^1 =$ 3 = 3

5) $2^2 \times 2^3 =$ 2^{2+3} = 32

6) $(3 \times 2)^3 =$ $3^3 \times 2^3$ = 216

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

8) $3^2 \times 3^{-4} =$ 3^{2-4} = $\frac{1}{9}$

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

10) $(2^2)^4 =$ $2^{2 \times 4}$ = 256

Answers

1. $\frac{1}{9}$
2. $\frac{1}{16}$
3. **1**
4. **3**
5. **32**
6. **216**
7. $\frac{1}{9}$
8. $\frac{1}{9}$
9. **9**
10. **256**

1-10	90	80	70	60	50	40	30	20	10	0