



Solve each problem. Answer as a decimal (if necessary).

1) 5×10^4 is _____ \times the value of 8×10^3

2) 4×10^2 is _____ \times the value of 5×10^4

3) 2×10^8 is _____ \times the value of 3×10^6

4) 4×10^4 is _____ \times the value of 7×10^9

5) 9×10^4 is _____ \times the value of 6×10^6

6) 9×10^6 is _____ \times the value of 5×10^2

7) 6×10^4 is _____ \times the value of 3×10^6

8) 2×10^3 is _____ \times the value of 5×10^9

9) 9×10^8 is _____ \times the value of 8×10^4

Answers

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

8. _____

9. _____



Solve each problem. Answer as a decimal (if necessary).

1) 5×10^4 is _____ \times the value of 8×10^3

$$\frac{5 \times 10^4}{8 \times 10^3} = \frac{5}{8} \times \frac{10^4}{10^3} = \frac{5}{8} \times 10^1 = 0.625 \times 10^1$$

2) 4×10^2 is _____ \times the value of 5×10^4

$$\frac{4 \times 10^2}{5 \times 10^4} = \frac{4}{5} \times \frac{10^2}{10^4} = \frac{4}{5} \times 10^{-2} = 0.8 \times 10^{-2}$$

3) 2×10^8 is _____ \times the value of 3×10^6

$$\frac{2 \times 10^8}{3 \times 10^6} = \frac{2}{3} \times \frac{10^8}{10^6} = \frac{2}{3} \times 10^2 = 0.667 \times 10^2$$

4) 4×10^4 is _____ \times the value of 7×10^9

$$\frac{4 \times 10^4}{7 \times 10^9} = \frac{4}{7} \times \frac{10^4}{10^9} = \frac{4}{7} \times 10^{-5} = 0.571 \times 10^{-5}$$

5) 9×10^4 is _____ \times the value of 6×10^6

$$\frac{9 \times 10^4}{6 \times 10^6} = \frac{9}{6} \times \frac{10^4}{10^6} = \frac{3}{2} \times 10^{-2} = 1.5 \times 10^{-2}$$

6) 9×10^6 is _____ \times the value of 5×10^2

$$\frac{9 \times 10^6}{5 \times 10^2} = \frac{9}{5} \times \frac{10^6}{10^2} = \frac{9}{5} \times 10^4 = 1.8 \times 10^4$$

7) 6×10^4 is _____ \times the value of 3×10^6

$$\frac{6 \times 10^4}{3 \times 10^6} = \frac{6}{3} \times \frac{10^4}{10^6} = \frac{2}{1} \times 10^{-2} = 2 \times 10^{-2}$$

8) 2×10^3 is _____ \times the value of 5×10^9

$$\frac{2 \times 10^3}{5 \times 10^9} = \frac{2}{5} \times \frac{10^3}{10^9} = \frac{2}{5} \times 10^{-6} = 0.4 \times 10^{-6}$$

9) 9×10^8 is _____ \times the value of 8×10^4

$$\frac{9 \times 10^8}{8 \times 10^4} = \frac{9}{8} \times \frac{10^8}{10^4} = \frac{9}{8} \times 10^4 = 1.125 \times 10^4$$

Answers

1. **6.25**

2. **0.008**

3. **66.7**

4. **0.00000571**

5. **0.015**

6. **18,000**

7. **0.02**

8. **0.0000004**

9. **11,250**