



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

1) 4×10^8 is _____ \times the value of 7×10^6

2) 8×10^3 is _____ \times the value of 7×10^4

3) 9×10^4 is _____ \times the value of 5×10^2

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

5) 5×10^8 is _____ \times the value of 7×10^9

6) 2×10^8 is _____ \times the value of 6×10^5

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

8) 5×10^7 is _____ \times the value of 7×10^9

9) 7×10^8 is _____ \times the value of 4×10^4

Answers

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

8. _____

9. _____



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

1) 4×10^8 is _____ \times the value of 7×10^6

$$\frac{4 \times 10^8}{7 \times 10^6} = \frac{4}{7} \times \frac{10^8}{10^6} = \frac{4}{7} \times 10^2 = 0.571 \times 10^2$$

2) 8×10^3 is _____ \times the value of 7×10^4

$$\frac{8 \times 10^3}{7 \times 10^4} = \frac{8}{7} \times \frac{10^3}{10^4} = \frac{8}{7} \times 10^{-1} = 1.143 \times 10^{-1}$$

3) 9×10^4 is _____ \times the value of 5×10^2

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

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

$$\frac{4 \times 10^4}{5 \times 10^9} = \frac{4}{5} \times \frac{10^4}{10^9} = \frac{4}{5} \times 10^{-5} = 0.8 \times 10^{-5}$$

5) 5×10^8 is _____ \times the value of 7×10^9

$$\frac{5 \times 10^8}{7 \times 10^9} = \frac{5}{7} \times \frac{10^8}{10^9} = \frac{5}{7} \times 10^{-1} = 0.714 \times 10^{-1}$$

6) 2×10^8 is _____ \times the value of 6×10^5

$$\frac{2 \times 10^8}{6 \times 10^5} = \frac{2}{6} \times \frac{10^8}{10^5} = \frac{1}{3} \times 10^3 = 0.333 \times 10^3$$

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

$$\frac{4 \times 10^7}{6 \times 10^6} = \frac{4}{6} \times \frac{10^7}{10^6} = \frac{2}{3} \times 10^1 = 0.667 \times 10^1$$

8) 5×10^7 is _____ \times the value of 7×10^9

$$\frac{5 \times 10^7}{7 \times 10^9} = \frac{5}{7} \times \frac{10^7}{10^9} = \frac{5}{7} \times 10^{-2} = 0.714 \times 10^{-2}$$

9) 7×10^8 is _____ \times the value of 4×10^4

$$\frac{7 \times 10^8}{4 \times 10^4} = \frac{7}{4} \times \frac{10^8}{10^4} = \frac{7}{4} \times 10^4 = 1.75 \times 10^4$$

Answers

1. 57.1

2. 0.1143

3. 180

4. 0.000008

5. 0.0714

6. 333

7. 6.67

8. 0.00714

9. 17,500