



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

1) 6×10^5 is _____ \times the value of 3×10^7

2) 7×10^2 is _____ \times the value of 5×10^9

3) 4×10^9 is _____ \times the value of 8×10^8

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

5) 7×10^4 is _____ \times the value of 3×10^6

6) 9×10^4 is _____ \times the value of 5×10^2

7) 6×10^2 is _____ \times the value of 5×10^4

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

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

Answers

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

8. _____

9. _____



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

1) 6×10^5 is _____ \times the value of 3×10^7

$$\frac{6 \times 10^5}{3 \times 10^7} = \frac{6}{3} \times \frac{10^5}{10^7} = \frac{2}{1} \times 10^{-2} = 2 \times 10^{-2}$$

2) 7×10^2 is _____ \times the value of 5×10^9

$$\frac{7 \times 10^2}{5 \times 10^9} = \frac{7}{5} \times \frac{10^2}{10^9} = \frac{7}{5} \times 10^{-7} = 1.4 \times 10^{-7}$$

3) 4×10^9 is _____ \times the value of 8×10^8

$$\frac{4 \times 10^9}{8 \times 10^8} = \frac{4}{8} \times \frac{10^9}{10^8} = \frac{1}{2} \times 10^1 = 0.5 \times 10^1$$

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

$$\frac{5 \times 10^2}{2 \times 10^4} = \frac{5}{2} \times \frac{10^2}{10^4} = \frac{5}{2} \times 10^{-2} = 2.5 \times 10^{-2}$$

5) 7×10^4 is _____ \times the value of 3×10^6

$$\frac{7 \times 10^4}{3 \times 10^6} = \frac{7}{3} \times \frac{10^4}{10^6} = \frac{7}{3} \times 10^{-2} = 2.333 \times 10^{-2}$$

6) 9×10^4 is _____ \times the value of 5×10^2

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

7) 6×10^2 is _____ \times the value of 5×10^4

$$\frac{6 \times 10^2}{5 \times 10^4} = \frac{6}{5} \times \frac{10^2}{10^4} = \frac{6}{5} \times 10^{-2} = 1.2 \times 10^{-2}$$

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

$$\frac{2 \times 10^9}{8 \times 10^5} = \frac{2}{8} \times \frac{10^9}{10^5} = \frac{1}{4} \times 10^4 = 0.25 \times 10^4$$

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

$$\frac{9 \times 10^5}{7 \times 10^8} = \frac{9}{7} \times \frac{10^5}{10^8} = \frac{9}{7} \times 10^{-3} = 1.286 \times 10^{-3}$$

Answers

1. 0.02

2. 0.00000014

3. 5

4. 0.025

5. 0.02333

6. 180

7. 0.012

8. 2,500

9. 0.001286