



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

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

2) 6×10^2 is _____ \times the value of 7×10^3

3) 4×10^6 is _____ \times the value of 3×10^2

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

5) 6×10^7 is _____ \times the value of 9×10^6

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

7) 5×10^9 is _____ \times the value of 8×10^6

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

9) 5×10^7 is _____ \times the value of 3×10^8

Answers

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

8. _____

9. _____



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

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

$$\frac{7 \times 10^5}{3 \times 10^6} = \frac{7}{3} \times \frac{10^5}{10^6} = \frac{7}{3} \times 10^{-1} = 2.333 \times 10^{-1}$$

2) 6×10^2 is _____ \times the value of 7×10^3

$$\frac{6 \times 10^2}{7 \times 10^3} = \frac{6}{7} \times \frac{10^2}{10^3} = \frac{6}{7} \times 10^{-1} = 0.857 \times 10^{-1}$$

3) 4×10^6 is _____ \times the value of 3×10^2

$$\frac{4 \times 10^6}{3 \times 10^2} = \frac{4}{3} \times \frac{10^6}{10^2} = \frac{4}{3} \times 10^4 = 1.333 \times 10^4$$

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

$$\frac{9 \times 10^5}{4 \times 10^9} = \frac{9}{4} \times \frac{10^5}{10^9} = \frac{9}{4} \times 10^{-4} = 2.25 \times 10^{-4}$$

5) 6×10^7 is _____ \times the value of 9×10^6

$$\frac{6 \times 10^7}{9 \times 10^6} = \frac{6}{9} \times \frac{10^7}{10^6} = \frac{2}{3} \times 10^1 = 0.667 \times 10^1$$

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

$$\frac{3 \times 10^3}{6 \times 10^5} = \frac{3}{6} \times \frac{10^3}{10^5} = \frac{1}{2} \times 10^{-2} = 0.5 \times 10^{-2}$$

7) 5×10^9 is _____ \times the value of 8×10^6

$$\frac{5 \times 10^9}{8 \times 10^6} = \frac{5}{8} \times \frac{10^9}{10^6} = \frac{5}{8} \times 10^3 = 0.625 \times 10^3$$

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

$$\frac{7 \times 10^8}{2 \times 10^4} = \frac{7}{2} \times \frac{10^8}{10^4} = \frac{7}{2} \times 10^4 = 3.5 \times 10^4$$

9) 5×10^7 is _____ \times the value of 3×10^8

$$\frac{5 \times 10^7}{3 \times 10^8} = \frac{5}{3} \times \frac{10^7}{10^8} = \frac{5}{3} \times 10^{-1} = 1.667 \times 10^{-1}$$

Answers

1. **0.2333**

2. **0.0857**

3. **13,330**

4. **0.000225**

5. **6.67**

6. **0.005**

7. **625**

8. **35,000**

9. **0.1667**