



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

1) 8×10^3 is _____ \times the value of 6×10^5

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

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

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

5) 3×10^2 is _____ \times the value of 6×10^9

6) 4×10^9 is _____ \times the value of 7×10^6

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

8) 6×10^6 is _____ \times the value of 2×10^7

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

Answers

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

8. _____

9. _____



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

1) 8×10^3 is _____ \times the value of 6×10^5

$$\frac{8 \times 10^3}{6 \times 10^5} = \frac{8}{6} \times \frac{10^3}{10^5} = \frac{4}{3} \times 10^{-2} = 1.333 \times 10^{-2}$$

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

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

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

$$\frac{5 \times 10^8}{7 \times 10^5} = \frac{5}{7} \times \frac{10^8}{10^5} = \frac{5}{7} \times 10^3 = 0.714 \times 10^3$$

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

$$\frac{5 \times 10^9}{4 \times 10^2} = \frac{5}{4} \times \frac{10^9}{10^2} = \frac{5}{4} \times 10^7 = 1.25 \times 10^7$$

5) 3×10^2 is _____ \times the value of 6×10^9

$$\frac{3 \times 10^2}{6 \times 10^9} = \frac{3}{6} \times \frac{10^2}{10^9} = \frac{1}{2} \times 10^{-7} = 0.5 \times 10^{-7}$$

6) 4×10^9 is _____ \times the value of 7×10^6

$$\frac{4 \times 10^9}{7 \times 10^6} = \frac{4}{7} \times \frac{10^9}{10^6} = \frac{4}{7} \times 10^3 = 0.571 \times 10^3$$

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

$$\frac{2 \times 10^6}{6 \times 10^2} = \frac{2}{6} \times \frac{10^6}{10^2} = \frac{1}{3} \times 10^4 = 0.333 \times 10^4$$

8) 6×10^6 is _____ \times the value of 2×10^7

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

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

$$\frac{7 \times 10^6}{6 \times 10^5} = \frac{7}{6} \times \frac{10^6}{10^5} = \frac{7}{6} \times 10^1 = 1.167 \times 10^1$$

Answers

1. 0.01333

2. 0.003

3. 714

4. 12,500,000

5. 0.00000005

6. 571

7. 3,330

8. 0.3

9. 11.67