



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

1) 6×10^8 is _____ \times the value of 9×10^9

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

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

4) 9×10^5 is _____ \times the value of 5×10^7

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

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

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

8) 4×10^3 is _____ \times the value of 6×10^5

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

Answers

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

8. _____

9. _____



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

1) 6×10^8 is _____ \times the value of 9×10^9

$$\frac{6 \times 10^8}{9 \times 10^9} = \frac{6}{9} \times \frac{10^8}{10^9} = \frac{2}{3} \times 10^{-1} = 0.667 \times 10^{-1}$$

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

$$\frac{5 \times 10^5}{2 \times 10^2} = \frac{5}{2} \times \frac{10^5}{10^2} = \frac{5}{2} \times 10^3 = 2.5 \times 10^3$$

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

$$\frac{8 \times 10^7}{3 \times 10^9} = \frac{8}{3} \times \frac{10^7}{10^9} = \frac{8}{3} \times 10^{-2} = 2.667 \times 10^{-2}$$

4) 9×10^5 is _____ \times the value of 5×10^7

$$\frac{9 \times 10^5}{5 \times 10^7} = \frac{9}{5} \times \frac{10^5}{10^7} = \frac{9}{5} \times 10^{-2} = 1.8 \times 10^{-2}$$

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

$$\frac{9 \times 10^6}{6 \times 10^8} = \frac{9}{6} \times \frac{10^6}{10^8} = \frac{3}{2} \times 10^{-2} = 1.5 \times 10^{-2}$$

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

$$\frac{7 \times 10^8}{6 \times 10^6} = \frac{7}{6} \times \frac{10^8}{10^6} = \frac{7}{6} \times 10^2 = 1.167 \times 10^2$$

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

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

8) 4×10^3 is _____ \times the value of 6×10^5

$$\frac{4 \times 10^3}{6 \times 10^5} = \frac{4}{6} \times \frac{10^3}{10^5} = \frac{2}{3} \times 10^{-2} = 0.667 \times 10^{-2}$$

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

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

Answers

1. 0.0667

2. 2,500

3. 0.02667

4. 0.018

5. 0.015

6. 116.7

7. 0.000000625

8. 0.00667

9. 0.001333