



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

1) 5×10^9 is _____ \times the value of 9×10^7

2) 8×10^5 is _____ \times the value of 6×10^7

3) 5×10^7 is _____ \times the value of 4×10^2

4) 9×10^3 is _____ \times the value of 3×10^6

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

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

7) 9×10^5 is _____ \times the value of 4×10^6

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

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

Answers

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

8. _____

9. _____



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

1) 5×10^9 is _____ \times the value of 9×10^7

$$\frac{5 \times 10^9}{9 \times 10^7} = \frac{5}{9} \times \frac{10^9}{10^7} = \frac{5}{9} \times 10^2 = 0.556 \times 10^2$$

2) 8×10^5 is _____ \times the value of 6×10^7

$$\frac{8 \times 10^5}{6 \times 10^7} = \frac{8}{6} \times \frac{10^5}{10^7} = \frac{4}{3} \times 10^{-2} = 1.333 \times 10^{-2}$$

3) 5×10^7 is _____ \times the value of 4×10^2

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

4) 9×10^3 is _____ \times the value of 3×10^6

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

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

$$\frac{5 \times 10^9}{2 \times 10^3} = \frac{5}{2} \times \frac{10^9}{10^3} = \frac{5}{2} \times 10^6 = 2.5 \times 10^6$$

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

$$\frac{4 \times 10^4}{9 \times 10^7} = \frac{4}{9} \times \frac{10^4}{10^7} = \frac{4}{9} \times 10^{-3} = 0.444 \times 10^{-3}$$

7) 9×10^5 is _____ \times the value of 4×10^6

$$\frac{9 \times 10^5}{4 \times 10^6} = \frac{9}{4} \times \frac{10^5}{10^6} = \frac{9}{4} \times 10^{-1} = 2.25 \times 10^{-1}$$

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

$$\frac{2 \times 10^8}{9 \times 10^5} = \frac{2}{9} \times \frac{10^8}{10^5} = \frac{2}{9} \times 10^3 = 0.222 \times 10^3$$

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

$$\frac{5 \times 10^9}{2 \times 10^2} = \frac{5}{2} \times \frac{10^9}{10^2} = \frac{5}{2} \times 10^7 = 2.5 \times 10^7$$

Answers

1. 55.6
2. 0.01333
3. 125,000
4. 0.003
5. 2,500,000
6. 0.000444
7. 0.225
8. 222
9. 25,000,000