



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

1) 6×10^6 is _____ \times the value of 5×10^9

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

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

4) 8×10^8 is _____ \times the value of 7×10^3

5) 4×10^9 is _____ \times the value of 7×10^8

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

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

8) 9×10^6 is _____ \times the value of 2×10^4

9) 8×10^8 is _____ \times the value of 4×10^5

Answers

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

8. _____

9. _____



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

1) 6×10^6 is _____ \times the value of 5×10^9

$$\frac{6 \times 10^6}{5 \times 10^9} = \frac{6}{5} \times \frac{10^6}{10^9} = \frac{6}{5} \times 10^{-3} = 1.2 \times 10^{-3}$$

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

$$\frac{7 \times 10^5}{9 \times 10^9} = \frac{7}{9} \times \frac{10^5}{10^9} = \frac{7}{9} \times 10^{-4} = 0.778 \times 10^{-4}$$

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

$$\frac{4 \times 10^3}{9 \times 10^6} = \frac{4}{9} \times \frac{10^3}{10^6} = \frac{4}{9} \times 10^{-3} = 0.444 \times 10^{-3}$$

4) 8×10^8 is _____ \times the value of 7×10^3

$$\frac{8 \times 10^8}{7 \times 10^3} = \frac{8}{7} \times \frac{10^8}{10^3} = \frac{8}{7} \times 10^5 = 1.143 \times 10^5$$

5) 4×10^9 is _____ \times the value of 7×10^8

$$\frac{4 \times 10^9}{7 \times 10^8} = \frac{4}{7} \times \frac{10^9}{10^8} = \frac{4}{7} \times 10^1 = 0.571 \times 10^1$$

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

$$\frac{6 \times 10^2}{7 \times 10^4} = \frac{6}{7} \times \frac{10^2}{10^4} = \frac{6}{7} \times 10^{-2} = 0.857 \times 10^{-2}$$

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

$$\frac{5 \times 10^8}{7 \times 10^9} = \frac{5}{7} \times \frac{10^8}{10^9} = \frac{5}{7} \times 10^{-1} = 0.714 \times 10^{-1}$$

8) 9×10^6 is _____ \times the value of 2×10^4

$$\frac{9 \times 10^6}{2 \times 10^4} = \frac{9}{2} \times \frac{10^6}{10^4} = \frac{9}{2} \times 10^2 = 4.5 \times 10^2$$

9) 8×10^8 is _____ \times the value of 4×10^5

$$\frac{8 \times 10^8}{4 \times 10^5} = \frac{8}{4} \times \frac{10^8}{10^5} = \frac{2}{1} \times 10^3 = 2 \times 10^3$$

Answers

1. **0.0012**

2. **0.0000778**

3. **0.000444**

4. **114,300**

5. **5.71**

6. **0.00857**

7. **0.0714**

8. **450**

9. **2,000**