



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

1) 3×10^6 is _____ \times the value of 8×10^7

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

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

4) 4×10^2 is _____ \times the value of 9×10^7

5) 6×10^7 is _____ \times the value of 9×10^2

6) 7×10^8 is _____ \times the value of 9×10^4

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

8) 8×10^7 is _____ \times the value of 4×10^6

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

Answers

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

8. _____

9. _____



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

1) 3×10^6 is _____ \times the value of 8×10^7

$$\frac{3 \times 10^6}{8 \times 10^7} = \frac{3}{8} \times \frac{10^6}{10^7} = \frac{3}{8} \times 10^{-1} = 0.375 \times 10^{-1}$$

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

$$\frac{7 \times 10^5}{8 \times 10^7} = \frac{7}{8} \times \frac{10^5}{10^7} = \frac{7}{8} \times 10^{-2} = 0.875 \times 10^{-2}$$

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

$$\frac{2 \times 10^6}{6 \times 10^5} = \frac{2}{6} \times \frac{10^6}{10^5} = \frac{1}{3} \times 10^1 = 0.333 \times 10^1$$

4) 4×10^2 is _____ \times the value of 9×10^7

$$\frac{4 \times 10^2}{9 \times 10^7} = \frac{4}{9} \times \frac{10^2}{10^7} = \frac{4}{9} \times 10^{-5} = 0.444 \times 10^{-5}$$

5) 6×10^7 is _____ \times the value of 9×10^2

$$\frac{6 \times 10^7}{9 \times 10^2} = \frac{6}{9} \times \frac{10^7}{10^2} = \frac{2}{3} \times 10^5 = 0.667 \times 10^5$$

6) 7×10^8 is _____ \times the value of 9×10^4

$$\frac{7 \times 10^8}{9 \times 10^4} = \frac{7}{9} \times \frac{10^8}{10^4} = \frac{7}{9} \times 10^4 = 0.778 \times 10^4$$

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

$$\frac{6 \times 10^4}{7 \times 10^9} = \frac{6}{7} \times \frac{10^4}{10^9} = \frac{6}{7} \times 10^{-5} = 0.857 \times 10^{-5}$$

8) 8×10^7 is _____ \times the value of 4×10^6

$$\frac{8 \times 10^7}{4 \times 10^6} = \frac{8}{4} \times \frac{10^7}{10^6} = \frac{2}{1} \times 10^1 = 2 \times 10^1$$

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

$$\frac{7 \times 10^9}{2 \times 10^7} = \frac{7}{2} \times \frac{10^9}{10^7} = \frac{7}{2} \times 10^2 = 3.5 \times 10^2$$

Answers

1. **0.0375**

2. **0.00875**

3. **3.33**

4. **0.00000444**

5. **66,700**

6. **7,780**

7. **0.00000857**

8. **20**

9. **350**