



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

1)  $3 \times 10^6$  is \_\_\_\_\_  $\times$  the value of  $9 \times 10^8$

2)  $3 \times 10^3$  is \_\_\_\_\_  $\times$  the value of  $7 \times 10^5$

3)  $7 \times 10^3$  is \_\_\_\_\_  $\times$  the value of  $3 \times 10^6$

4)  $7 \times 10^2$  is \_\_\_\_\_  $\times$  the value of  $2 \times 10^5$

5)  $8 \times 10^9$  is \_\_\_\_\_  $\times$  the value of  $3 \times 10^6$

6)  $4 \times 10^8$  is \_\_\_\_\_  $\times$  the value of  $7 \times 10^2$

7)  $8 \times 10^5$  is \_\_\_\_\_  $\times$  the value of  $4 \times 10^3$

8)  $7 \times 10^8$  is \_\_\_\_\_  $\times$  the value of  $4 \times 10^5$

9)  $5 \times 10^3$  is \_\_\_\_\_  $\times$  the value of  $4 \times 10^2$

**Answers**

1. \_\_\_\_\_

2. \_\_\_\_\_

3. \_\_\_\_\_

4. \_\_\_\_\_

5. \_\_\_\_\_

6. \_\_\_\_\_

7. \_\_\_\_\_

8. \_\_\_\_\_

9. \_\_\_\_\_



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

1)  $3 \times 10^6$  is \_\_\_\_\_  $\times$  the value of  $9 \times 10^8$

$$\frac{3 \times 10^6}{9 \times 10^8} = \frac{3}{9} \times \frac{10^6}{10^8} = \frac{1}{3} \times 10^{-2} = 0.333 \times 10^{-2}$$

2)  $3 \times 10^3$  is \_\_\_\_\_  $\times$  the value of  $7 \times 10^5$

$$\frac{3 \times 10^3}{7 \times 10^5} = \frac{3}{7} \times \frac{10^3}{10^5} = \frac{3}{7} \times 10^{-2} = 0.429 \times 10^{-2}$$

3)  $7 \times 10^3$  is \_\_\_\_\_  $\times$  the value of  $3 \times 10^6$

$$\frac{7 \times 10^3}{3 \times 10^6} = \frac{7}{3} \times \frac{10^3}{10^6} = \frac{7}{3} \times 10^{-3} = 2.333 \times 10^{-3}$$

4)  $7 \times 10^2$  is \_\_\_\_\_  $\times$  the value of  $2 \times 10^5$

$$\frac{7 \times 10^2}{2 \times 10^5} = \frac{7}{2} \times \frac{10^2}{10^5} = \frac{7}{2} \times 10^{-3} = 3.5 \times 10^{-3}$$

5)  $8 \times 10^9$  is \_\_\_\_\_  $\times$  the value of  $3 \times 10^6$

$$\frac{8 \times 10^9}{3 \times 10^6} = \frac{8}{3} \times \frac{10^9}{10^6} = \frac{8}{3} \times 10^3 = 2.667 \times 10^3$$

6)  $4 \times 10^8$  is \_\_\_\_\_  $\times$  the value of  $7 \times 10^2$

$$\frac{4 \times 10^8}{7 \times 10^2} = \frac{4}{7} \times \frac{10^8}{10^2} = \frac{4}{7} \times 10^6 = 0.571 \times 10^6$$

7)  $8 \times 10^5$  is \_\_\_\_\_  $\times$  the value of  $4 \times 10^3$

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

8)  $7 \times 10^8$  is \_\_\_\_\_  $\times$  the value of  $4 \times 10^5$

$$\frac{7 \times 10^8}{4 \times 10^5} = \frac{7}{4} \times \frac{10^8}{10^5} = \frac{7}{4} \times 10^3 = 1.75 \times 10^3$$

9)  $5 \times 10^3$  is \_\_\_\_\_  $\times$  the value of  $4 \times 10^2$

$$\frac{5 \times 10^3}{4 \times 10^2} = \frac{5}{4} \times \frac{10^3}{10^2} = \frac{5}{4} \times 10^1 = 1.25 \times 10^1$$

**Answers**

1. **0.00333**

2. **0.00429**

3. **0.002333**

4. **0.0035**

5. **2,667**

6. **571,000**

7. **200**

8. **1,750**

9. **12.5**