



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

1)  $3 \times 10^4$  is \_\_\_\_\_  $\times$  the value of  $4 \times 10^8$

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

3)  $6 \times 10^5$  is \_\_\_\_\_  $\times$  the value of  $2 \times 10^6$

4)  $2 \times 10^7$  is \_\_\_\_\_  $\times$  the value of  $4 \times 10^3$

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

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

7)  $8 \times 10^9$  is \_\_\_\_\_  $\times$  the value of  $3 \times 10^3$

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

9)  $8 \times 10^9$  is \_\_\_\_\_  $\times$  the value of  $7 \times 10^4$

**Answers**

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

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

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

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

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

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

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

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

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



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

1)  $3 \times 10^4$  is \_\_\_\_\_  $\times$  the value of  $4 \times 10^8$

$$\frac{3 \times 10^4}{4 \times 10^8} = \frac{3}{4} \times \frac{10^4}{10^8} = \frac{3}{4} \times 10^{-4} = 0.75 \times 10^{-4}$$

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

$$\frac{2 \times 10^9}{4 \times 10^5} = \frac{2}{4} \times \frac{10^9}{10^5} = \frac{1}{2} \times 10^4 = 0.5 \times 10^4$$

3)  $6 \times 10^5$  is \_\_\_\_\_  $\times$  the value of  $2 \times 10^6$

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

4)  $2 \times 10^7$  is \_\_\_\_\_  $\times$  the value of  $4 \times 10^3$

$$\frac{2 \times 10^7}{4 \times 10^3} = \frac{2}{4} \times \frac{10^7}{10^3} = \frac{1}{2} \times 10^4 = 0.5 \times 10^4$$

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

$$\frac{4 \times 10^5}{5 \times 10^3} = \frac{4}{5} \times \frac{10^5}{10^3} = \frac{4}{5} \times 10^2 = 0.8 \times 10^2$$

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

$$\frac{2 \times 10^6}{4 \times 10^4} = \frac{2}{4} \times \frac{10^6}{10^4} = \frac{1}{2} \times 10^2 = 0.5 \times 10^2$$

7)  $8 \times 10^9$  is \_\_\_\_\_  $\times$  the value of  $3 \times 10^3$

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

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

$$\frac{4 \times 10^5}{5 \times 10^4} = \frac{4}{5} \times \frac{10^5}{10^4} = \frac{4}{5} \times 10^1 = 0.8 \times 10^1$$

9)  $8 \times 10^9$  is \_\_\_\_\_  $\times$  the value of  $7 \times 10^4$

$$\frac{8 \times 10^9}{7 \times 10^4} = \frac{8}{7} \times \frac{10^9}{10^4} = \frac{8}{7} \times 10^5 = 1.143 \times 10^5$$

Answers

1. 0.000075
2. 5,000
3. 0.3
4. 5,000
5. 80
6. 50
7. 2,667,000
8. 8
9. 114,300