



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

1)  $6 \times 10^2$  is \_\_\_\_\_  $\times$  the value of  $2 \times 10^9$

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

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

4)  $2 \times 10^9$  is \_\_\_\_\_  $\times$  the value of  $7 \times 10^3$

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

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

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

8)  $4 \times 10^6$  is \_\_\_\_\_  $\times$  the value of  $5 \times 10^8$

9)  $7 \times 10^7$  is \_\_\_\_\_  $\times$  the value of  $6 \times 10^5$

Answers

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

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

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

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

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

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

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

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

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



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

1)  $6 \times 10^2$  is \_\_\_\_\_  $\times$  the value of  $2 \times 10^9$

$$\frac{6 \times 10^2}{2 \times 10^9} = \frac{6}{2} \times \frac{10^2}{10^9} = \frac{3}{1} \times 10^{-7} = 3 \times 10^{-7}$$

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

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

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

$$\frac{5 \times 10^7}{7 \times 10^4} = \frac{5}{7} \times \frac{10^7}{10^4} = \frac{5}{7} \times 10^3 = 0.714 \times 10^3$$

4)  $2 \times 10^9$  is \_\_\_\_\_  $\times$  the value of  $7 \times 10^3$

$$\frac{2 \times 10^9}{7 \times 10^3} = \frac{2}{7} \times \frac{10^9}{10^3} = \frac{2}{7} \times 10^6 = 0.286 \times 10^6$$

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

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

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

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

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

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

8)  $4 \times 10^6$  is \_\_\_\_\_  $\times$  the value of  $5 \times 10^8$

$$\frac{4 \times 10^6}{5 \times 10^8} = \frac{4}{5} \times \frac{10^6}{10^8} = \frac{4}{5} \times 10^{-2} = 0.8 \times 10^{-2}$$

9)  $7 \times 10^7$  is \_\_\_\_\_  $\times$  the value of  $6 \times 10^5$

$$\frac{7 \times 10^7}{6 \times 10^5} = \frac{7}{6} \times \frac{10^7}{10^5} = \frac{7}{6} \times 10^2 = 1.167 \times 10^2$$

Answers

1. 0.0000

2. 133,300

3. 714

4. 286,000

5. 0.0001143

6. 333,000

7. 0.001143

8. 0.008

9. 116.7