



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

Answers

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

1. _____

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

2. _____

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

3. _____

4) 9×10^3 is _____ \times the value of 8×10^5

4. _____

5) 6×10^3 is _____ \times the value of 3×10^8

5. _____

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

6. _____

7) 3×10^2 is _____ \times the value of 5×10^8

7. _____

8) 6×10^2 is _____ \times the value of 5×10^8

8. _____

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

9. _____



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

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

$$\frac{7 \times 10^3}{6 \times 10^7} = \frac{7}{6} \times \frac{10^3}{10^7} = \frac{7}{6} \times 10^{-4} = 1.167 \times 10^{-4}$$

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

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

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

$$\frac{8 \times 10^8}{3 \times 10^3} = \frac{8}{3} \times \frac{10^8}{10^3} = \frac{8}{3} \times 10^5 = 2.667 \times 10^5$$

4) 9×10^3 is _____ \times the value of 8×10^5

$$\frac{9 \times 10^3}{8 \times 10^5} = \frac{9}{8} \times \frac{10^3}{10^5} = \frac{9}{8} \times 10^{-2} = 1.125 \times 10^{-2}$$

5) 6×10^3 is _____ \times the value of 3×10^8

$$\frac{6 \times 10^3}{3 \times 10^8} = \frac{6}{3} \times \frac{10^3}{10^8} = \frac{2}{1} \times 10^{-5} = 2 \times 10^{-5}$$

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

$$\frac{9 \times 10^3}{6 \times 10^4} = \frac{9}{6} \times \frac{10^3}{10^4} = \frac{3}{2} \times 10^{-1} = 1.5 \times 10^{-1}$$

7) 3×10^2 is _____ \times the value of 5×10^8

$$\frac{3 \times 10^2}{5 \times 10^8} = \frac{3}{5} \times \frac{10^2}{10^8} = \frac{3}{5} \times 10^{-6} = 0.6 \times 10^{-6}$$

8) 6×10^2 is _____ \times the value of 5×10^8

$$\frac{6 \times 10^2}{5 \times 10^8} = \frac{6}{5} \times \frac{10^2}{10^8} = \frac{6}{5} \times 10^{-6} = 1.2 \times 10^{-6}$$

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

$$\frac{7 \times 10^7}{9 \times 10^2} = \frac{7}{9} \times \frac{10^7}{10^2} = \frac{7}{9} \times 10^5 = 0.778 \times 10^5$$

Answers

1. **0.0001167**

2. **3,000**

3. **266,700**

4. **0.01125**

5. **0.0000**

6. **0.15**

7. **0.0000006**

8. **0.0000012**

9. **77,800**