



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

Answers

1) 7×10^8 is _____ \times the value of 3×10^9

1. _____

2) 3×10^3 is _____ \times the value of 6×10^8

2. _____

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

3. _____

4) 8×10^8 is _____ \times the value of 3×10^2

4. _____

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

5. _____

6) 4×10^8 is _____ \times the value of 3×10^5

6. _____

7) 7×10^8 is _____ \times the value of 9×10^3

7. _____

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

8. _____

9) 2×10^5 is _____ \times the value of 8×10^4

9. _____



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

1) 7×10^8 is _____ \times the value of 3×10^9

$$\frac{7 \times 10^8}{3 \times 10^9} = \frac{7}{3} \times \frac{10^8}{10^9} = \frac{7}{3} \times 10^{-1} = 2.333 \times 10^{-1}$$

2) 3×10^3 is _____ \times the value of 6×10^8

$$\frac{3 \times 10^3}{6 \times 10^8} = \frac{3}{6} \times \frac{10^3}{10^8} = \frac{1}{2} \times 10^{-5} = 0.5 \times 10^{-5}$$

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

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

4) 8×10^8 is _____ \times the value of 3×10^2

$$\frac{8 \times 10^8}{3 \times 10^2} = \frac{8}{3} \times \frac{10^8}{10^2} = \frac{8}{3} \times 10^6 = 2.667 \times 10^6$$

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

$$\frac{8 \times 10^7}{2 \times 10^5} = \frac{8}{2} \times \frac{10^7}{10^5} = \frac{4}{1} \times 10^2 = 4 \times 10^2$$

6) 4×10^8 is _____ \times the value of 3×10^5

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

7) 7×10^8 is _____ \times the value of 9×10^3

$$\frac{7 \times 10^8}{9 \times 10^3} = \frac{7}{9} \times \frac{10^8}{10^3} = \frac{7}{9} \times 10^5 = 0.778 \times 10^5$$

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

$$\frac{3 \times 10^8}{9 \times 10^4} = \frac{3}{9} \times \frac{10^8}{10^4} = \frac{1}{3} \times 10^4 = 0.333 \times 10^4$$

9) 2×10^5 is _____ \times the value of 8×10^4

$$\frac{2 \times 10^5}{8 \times 10^4} = \frac{2}{8} \times \frac{10^5}{10^4} = \frac{1}{4} \times 10^1 = 0.25 \times 10^1$$

Answers

1. **0.2333**

2. **0.000005**

3. **0.3**

4. **2,667,000**

5. **400**

6. **1,333**

7. **77,800**

8. **3,330**

9. **2.5**