



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

1) 6×10^6 is _____ \times the value of 9×10^2

2) 3×10^5 is _____ \times the value of 4×10^2

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

4) 3×10^2 is _____ \times the value of 6×10^9

5) 3×10^2 is _____ \times the value of 4×10^5

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

7) 6×10^9 is _____ \times the value of 4×10^5

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

9) 3×10^8 is _____ \times the value of 6×10^4

Answers

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

8. _____

9. _____



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

1) 6×10^6 is _____ \times the value of 9×10^2

$$\frac{6 \times 10^6}{9 \times 10^2} = \frac{6}{9} \times \frac{10^6}{10^2} = \frac{2}{3} \times 10^4 = 0.667 \times 10^4$$

2) 3×10^5 is _____ \times the value of 4×10^2

$$\frac{3 \times 10^5}{4 \times 10^2} = \frac{3}{4} \times \frac{10^5}{10^2} = \frac{3}{4} \times 10^3 = 0.75 \times 10^3$$

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

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

4) 3×10^2 is _____ \times the value of 6×10^9

$$\frac{3 \times 10^2}{6 \times 10^9} = \frac{3}{6} \times \frac{10^2}{10^9} = \frac{1}{2} \times 10^{-7} = 0.5 \times 10^{-7}$$

5) 3×10^2 is _____ \times the value of 4×10^5

$$\frac{3 \times 10^2}{4 \times 10^5} = \frac{3}{4} \times \frac{10^2}{10^5} = \frac{3}{4} \times 10^{-3} = 0.75 \times 10^{-3}$$

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

$$\frac{3 \times 10^3}{4 \times 10^8} = \frac{3}{4} \times \frac{10^3}{10^8} = \frac{3}{4} \times 10^{-5} = 0.75 \times 10^{-5}$$

7) 6×10^9 is _____ \times the value of 4×10^5

$$\frac{6 \times 10^9}{4 \times 10^5} = \frac{6}{4} \times \frac{10^9}{10^5} = \frac{3}{2} \times 10^4 = 1.5 \times 10^4$$

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

$$\frac{6 \times 10^5}{4 \times 10^8} = \frac{6}{4} \times \frac{10^5}{10^8} = \frac{3}{2} \times 10^{-3} = 1.5 \times 10^{-3}$$

9) 3×10^8 is _____ \times the value of 6×10^4

$$\frac{3 \times 10^8}{6 \times 10^4} = \frac{3}{6} \times \frac{10^8}{10^4} = \frac{1}{2} \times 10^4 = 0.5 \times 10^4$$

Answers

1. 6,670
2. 750
3. 0.0015
4. 0.00000005
5. 0.00075
6. 0.0000075
7. 15,000
8. 0.0015
9. 5,000