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

1) 7×10^5 is _____ $\times$ the value of 6×10^4

1. _____

2. _____

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

3. _____

4. _____

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

5. _____

6. _____

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

7. _____

8. _____

5) 3×10^2 is _____ $\times$ the value of 9×10^4

9. _____

6) 7×10^2 is _____ $\times$ the value of 8×10^4

7) 3×10^5 is _____ $\times$ the value of 9×10^9

8) 5×10^3 is _____ $\times$ the value of 4×10^7

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

Math

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

Answers

1) 7×10^5 is _____ $\times$ the value of 6×10^4

$$\frac{7 \times 10^5}{6 \times 10^4} = \frac{7}{6} \times \frac{10^5}{10^4} = \frac{7}{6} \times 10^1 = 1.167 \times 10^1$$

1. **11.67**

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

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

2. **1,333**

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

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

3. **400**

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

$$\frac{3 \times 10^5}{4 \times 10^6} = \frac{3}{4} \times \frac{10^5}{10^6} = \frac{3}{4} \times 10^{-1} = 0.75 \times 10^{-1}$$

4. **0.075**

5. **0.00333**

5) 3×10^2 is _____ $\times$ the value of 9×10^4

$$\frac{3 \times 10^2}{9 \times 10^4} = \frac{3}{9} \times \frac{10^2}{10^4} = \frac{1}{3} \times 10^{-2} = 0.333 \times 10^{-2}$$

6. **0.00875**

6) 7×10^2 is _____ $\times$ the value of 8×10^4

$$\frac{7 \times 10^2}{8 \times 10^4} = \frac{7}{8} \times \frac{10^2}{10^4} = \frac{7}{8} \times 10^{-2} = 0.875 \times 10^{-2}$$

7. **0.0000333**

7) 3×10^5 is _____ $\times$ the value of 9×10^9

$$\frac{3 \times 10^5}{9 \times 10^9} = \frac{3}{9} \times \frac{10^5}{10^9} = \frac{1}{3} \times 10^{-4} = 0.333 \times 10^{-4}$$

8. **0.000125**

9. **0.000225**

8) 5×10^3 is _____ $\times$ the value of 4×10^7

$$\frac{5 \times 10^3}{4 \times 10^7} = \frac{5}{4} \times \frac{10^3}{10^7} = \frac{5}{4} \times 10^{-4} = 1.25 \times 10^{-4}$$

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

$$\frac{9 \times 10^2}{4 \times 10^6} = \frac{9}{4} \times \frac{10^2}{10^6} = \frac{9}{4} \times 10^{-4} = 2.25 \times 10^{-4}$$