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

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

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

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

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

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

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

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

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

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

Answers

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____

1-9	89	78	67	56	44	33	22	11	0

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

1) 7×10^8 is _____ × 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 _____ × 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 _____ × 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 _____ × 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 _____ × 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 _____ × 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 _____ × 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 _____ × 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 _____ × 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**

1-9	89	78	67	56	44	33	22	11	0