

Properties of Multiplication



Identify each property of multiplication.

1. $\frac{2}{3} \times (\frac{3}{8} \times 1\frac{1}{2}) = (\frac{2}{3} \times \frac{3}{8}) \times 1\frac{1}{2}$

2. $7 \times 2\frac{2}{9} = 2\frac{2}{9} \times 7$

3. $1 \times 2\frac{3}{4} = 2\frac{3}{4}$

4. $4 \times (3 + \frac{1}{4}) = (4 \times 3) + (4 \times \frac{1}{4})$

5. $3 \times 5 = 5 \times 3$

6. $4\frac{1}{6} \times 0 = 0$

7. $(3 + \frac{2}{3}) \times 9 = (3 \times 9) + (\frac{2}{3} \times 9)$

8. $\frac{5}{6} \times \frac{3}{8} \times 1 = \frac{5}{6} \times \frac{3}{8}$

Use the Associative Property to solve. Show your work.

9. $8 \times (\frac{3}{4} \times \frac{1}{6})$

10. $(2\frac{1}{3} \times 1\frac{4}{5}) \times 5$

Use the Distributive Property to solve.

11. $12 \times 4\frac{3}{4}$

12. $7\frac{3}{5} \times 10$

13. $6\frac{2}{3} \times 9$

14. $16 \times 3\frac{5}{8}$

Problem Solving

15. Mrs. Miller works $9\frac{1}{2}$ hours each day, 4 days a week. For how many hours does she work each week? Explain.

16. Each week Mr. Ortez makes 10 trips of $8\frac{1}{4}$ miles each between his house and work. Half of each trip is on the expressway. How many miles does Mr. Ortez drive on the expressway between home and work each week? Explain.
