

Every problem must be attempted and have all work shown, in order to receive credit!!

Simplify each expression.

1. $9 + 12 \div 3 - 5$

2. $\frac{2 \cdot 7 + 4}{9 \div 3}$

3. $1 + 2 \left[(8 - 4)^2 \div 8 \right]$

4. $10 - (2^2 + 4) \div (3 - 1)$

Evaluate each expression for $x = -4$ and $y = 8$.

5. $x^2 + y + x \div 2$

6. $2xy - x^2$

7. Use grouping symbols to make the equation $16 - 4 \div 2 + 3 = 9$ true.

Simplify.

8. $\frac{5}{7} + \frac{1}{3}$

9. $2\frac{1}{4} + 3\frac{4}{5}$

10. $\frac{8}{9} - \frac{4}{12}$

11. $8\frac{5}{9} - 2\frac{1}{2}$

12. $\frac{7}{4} \cdot \frac{12}{5}$

13. $\frac{9}{13} \div \frac{3}{7}$

14. $2\frac{1}{3} \div \frac{1}{2}$

Simplify.

15. $4(a + 3 - b)$

16. $16(a + b - 2)$