

Simplifying Expressions

Use the Distributive Property to simplify each expression.

1. $7(-5 + m)$ _____

2. $(5n + 3)12$ _____

3. $15(3y - 5)$ _____

4. $(7 + 6w)6$ _____

5. $(2b - 10)3.2$ _____

6. $4\left(\frac{1}{2}t - 5\right)$ _____

7. $1\left(-\frac{1}{2}r - \frac{5}{7}\right)$ _____

8. $\frac{2}{3}\left(\frac{2}{3}m - \frac{2}{3}\right)$ _____

9. $-(-8 - 6t)$ _____

10. $-(-r + 1)$ _____

11. $-(5.8a + 4.2b)$ _____

12. $-(f + 3g - 7)$ _____

Write each fraction as a sum or difference. Simplify fractions.

13. $\frac{14-6x}{19}$ _____

14. $\frac{9p-6}{3}$ _____

15. $\frac{15n-42}{14}$ _____

16. $\frac{81f+63}{9}$ _____

Simplify each expression by combining like terms.

17. $17y - 15y$ _____

18. $14n^2 - 7n^2$ _____

19. $8x + 3 - 5x - 9$ _____

20. $-2(5ab - 6)$ _____

21. $-17mn + 4mn - mn + 10mn$ _____

22. $7m^2n + 4m^2n^2 - 4m^2n - 5m^3n^2 - 5mn^2$ _____

23. $5(n - 8) + 6(7 - 2n)$ _____

24. $z + \frac{2z}{5} - \frac{4z}{5}$ _____

Write a word phrase for each expression. Then simplify each expression.

25. $2(n + 1)$ word phrase: _____

Simplified expression: _____

26. $-5(x - 7)$ word phrase: _____

Simplified expression: _____

27. $\frac{1}{2}(4m - 8)$ word phrase: _____

Simplified expression: _____

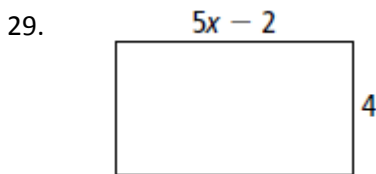
28. The tax a plumber must charge for a service call is given by the expression $0.06(35 + 25h)$ where h is the number of hours the job takes. Rewrite this expression using the Distributive Property. What is the tax for a 5 hour job and a 20 hour job?

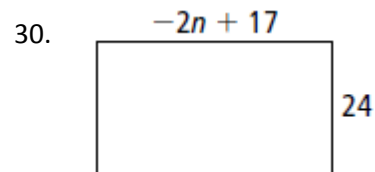
Rewrite this expression: _____

Tax for 5 hour job: _____

Tax for 20 hour job: _____

Geometry: Write an expression in simplified form for the area of each rectangle.





31. Reasoning: Demonstrate why $\frac{12x-6}{6} \neq 2x - 6$. Show your work.