

Review for Simplifying Expressions Quiz (Lessons 43 – 49)

Directions: Simplify the following expressions by combining like terms.

1. $14x - 11x - 6x$ $-3x$	2. $11x + 2 - 9 - 3x$ $8x - 7$	3. $-4x - 8 + 3 - 9$ $-5x - 6$
4. $2x - 1x + 5x$ $6x$	5. $6x + 2x - 8 - 3$ $8x - 11$	6. $5 - 2x + 7 + 8x$ $6x + 8$
7. $-x + 9 + 10x - 12$ $9x - 3$	8. $3 - 5x + 7 - 2x$ $-7x + 10$	9. $-4 + x - 8x + 2$ $-7x - 2$
10. $2 - 3x - x - 6$ $-4x - 4$	11. $3x + 7 - 5x$ $-2x + 7$	12. $15x + 8 - 17x - 10$ $-2x - 2$
13. $3 - x + 5 - 3x$ $-4x + 8$	14. $-2 + 11x - 7 - 8x$ $3x - 9$	15. $4x - 3x + 7x - 5$ $6x - 5$


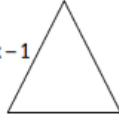
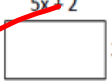



Directions: Simplify the following expressions by using the distributive property.

1. $-5(7 + x)$ $-35 - 5x$	2. $5(3x + 1)$ $15x + 5$	3. $7(-2x + 6)$ $-14x + 42$
4. $2(8x + 10)$ $16x + 20$	5. $-7(-2x - 3)$ $14x + 21$	6. $9(-5 - x)$ $-45 - 9x$
7. $6(-7x + 1)$ $-42x + 6$	8. $-1(x + 4)$ $-1x - 4$	9. $4(3x - 6)$ $12x - 24$

Directions: Simplify the following expressions by using the distributive property and/or by combining like terms.

1. $-3(2x+7)+15$ $-6x-21+15$ $-6x-6$	2. $5(3x-7)+15$ $15x-35+15$ $15x-20$	3. $2(x-6)+7$ $2x-12+7$ $2x-5$
4. $8(-3x+2)-12$ $-24x+16-12$ $-24x+4$	5. $3(-4x+7)$ $-12x+21$ $-12x+21$	6. $9(2x-4)-20x$ $18x-36-20x$ $-2x-36$
7. $9+5(x-4)-3x$ $9+5x-20-3x$ $2x-11$	8. $x-2(4x+3)$ $x-8x-6$ $-7x-6$	9. $-2(x-8)-11$ $-2x+16-11$ $-2x+5$
10. $5(x+2)-6x$ $5x+10-6x$ $-x+10$	11. $6(3x+2)-15$ $18x+12-15$ $18x-3$	12. $8x+3(2x-7)$ $8x+6x-21$ $14x-21$

Directions: Find the area or perimeter of each figure.

1) Find the perimeter of the square:  $3x+4$	2) Find the perimeter of the equilateral triangle:  $6x-1$	3) Find the area of the rectangle:  $5x+2$ 3
4) Find the perimeter of the regular hexagon:  $7x-2$	5) Find the area of the rectangle: :  $9x-4$ 6	6) Find the area of the rectangle:  $7x-3$ 5

Directions: Identify the variable, coefficient and constant of each expression.

1) $3x - 9$ Coefficient: <u>3</u> Variable: <u>x</u> Constant: <u>-9</u>	2) $-8x + 15$ Coefficient: <u>-8</u> Variable: <u>x</u> Constant: <u>15</u>	3) $-23 + 5x$ Coefficient: <u>5</u> Variable: <u>x</u> Constant: <u>-23</u>
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Directions: Translate the following sentences into an expression or equation. Use "n" as the variable.

- 1) Five times a number, increased by 6. $5n + 6$
- 2) Eight subtracted from a number. $n - 8$
- 3) The quotient of a number and 12 is 48. $\frac{n}{12} = 48$

Directions: Factor each expression using GCF.

1) $\frac{4x}{4} + \frac{12}{4}$ GCF: 4 <u>$4(x + 3)$</u>	2) $\frac{3x}{3} - \frac{27}{3}$ GCF: 3 <u>$3(x - 9)$</u>	3) $-9x + 63$ GCF: 9 <u>$9(-x + 7)$</u>	4) $-5x - 30$ GCF: 5 <u>$5(-x - 6)$</u>
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