

Warm-Up Simplify

December 17, 2019

$$(2x^2 - 2y + 3) - 2(-3x^2 + 5y - 8)$$

$$2x^2 - 2y + 3 + 6x^2 - 10y + 16$$

$$2x^2 + 6x^2 - 2y - 10y + 3 + 16$$

$$8x^2 - 12y + 19$$

- a) Type [Classify] *trinomial*
- b) variable (s) *x, y*
- c) constant *19*
- d) coefficients *8, -12*

$(-)(-) \rightarrow +$
 $(+)(+) \rightarrow +$
 $(+)(-) \rightarrow -$
 $(-)(+) \rightarrow -$

$$(2x - 4) + (-2x^2 + 8x - 3)$$

$$2x - 4 - 2x^2 + 8x - 3$$

$$-2x^2 + 2x + 8x - 4 - 3$$

$$-2x^2 + 10x - 7$$

$$(5x^2 - 3y + 2y^2) - (-8x^2 + 7y - 4y^2)$$

$$5x^2 - 3y + 2y^2 + 8x^2 - 7y + 4y^2$$

$$5x^2 + 8x^2 + 2y^2 + 4y^2 \boxed{-3y - 7y}$$

$$13x^2 + 6y^2 - 10y$$

$$6y^2 + 13x^2 - 10y$$

$$3(-3x^2 + 5x - 3y^2) - 2(8x^2 - 3x + 6y^2)$$

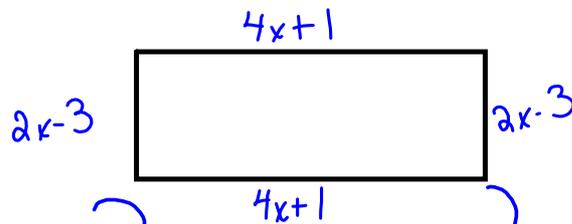
$$-9x^2 + 15x - 9y^2 - 16x^2 + 6x - 12y^2$$

$$-9x^2 - 16x^2 - 9y^2 - 12y^2 + 15x + 6x$$

$$-25x^2 - 21y^2 + 21x$$

$$-21y^2 - 25x^2 + 21x$$

Write a simplified expression for the perimeter [the distance around the outside]

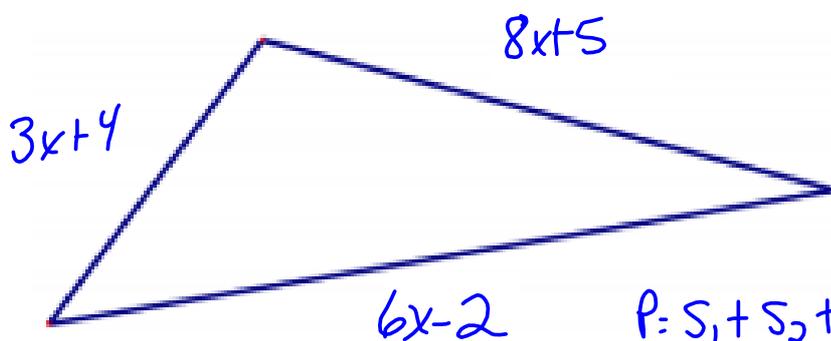


$$\begin{aligned}
 P &= S_1 + S_2 + S_3 + S_4 \\
 &= 2x-3 + 4x+1 + 2x-3 + 4x+1 \\
 &= 2x+4x+2x+4x-3+1-3+1 \\
 &= 12x-4
 \end{aligned}$$

$$\begin{aligned}
 P &= 2L + 2W \\
 &= 2(4x+1) + 2(2x-3) \\
 &= 8x+2+4x-6 \\
 &= 8x+4x+2-6 \\
 &= 12x-4
 \end{aligned}$$

$$\begin{aligned}
 P &= S_1 + S_2 + S_3 + S_4 \\
 &= 2x+4x+2x+4x-3+1-3+1 \\
 &= 12x-4
 \end{aligned}$$

Write a simplified expression for the perimeter.



$$P = S_1 + S_2 + S_3$$

$$= 6x - 2 + 8x + 5 + 3x + 4$$

$$= 6x + 8x + 3x - 2 + 5 + 4$$

$$\boxed{17x + 7}$$

Solve if $x = 2$

$$P = 17x + 7$$

$$17(2) + 7$$

$$34 + 7$$

$$P = 41$$

Solve if $x = 1$

$$P = 17x + 7$$

$$= 17(1) + 7$$

$$17 + 7$$

$$24$$

Simplify

$$(2x^2 - 2y + 2) - 3(-3x^2 + 5y - 4) + 3(6x^2 + 6y)$$

$$2x^2 - 2y + 2 + 9x^2 - 15y + 12 + 18x^2 + 18y$$

$$2x^2 + 9x^2 + 18x^2 - 2y - 15y + 18y + 2 + 12$$

$$\boxed{29x^2 + 1y + 14}$$

1. Copy the question
2. Remove the brackets
3. Group
4. Simplify

A. Page 229 #8 a, c, e, g

Page 229

← sketch
#9 [a,g], #10 all, #17 [a,c]

Page 235 8 [a,c,e,g]

Page 236 #15 a, c, e

1. Question
2. Remove Brackets
3. Group
4. Simplify

Worksheet...even questions only!

Page 504 Answers!