

# Warm-Up December 12, 2017

1.	Coefficient <i>the # in front of variable</i>	Constant <i>just a number</i>	Variable <i>letter</i>	Degree <i>highest exponent on variable</i>
a. $4-3x^2$	-3	4	$x$	2
b. $2x^2-x-4$ $2x^2-1x-4$	2, -1	-4	$x$	2

**Identify the like terms in each of the following:**

↳ the same degree  
↳ the same variable

A.  $-4x$ ,  $-4y$ ,  $x^2$ ,  $-2xy$ ,  $3x$ ,  $6y$ ,  $-x$ ,

$-4x, 3x, -1x$   
 $-4y, 6y$

B.  $0.5$ ,  $7y^2$ ,  $-2$ ,  $-3x$ ,  $1/2$ ,  $5xy^2$

$0.5, 2, 1/2$

3. Add **[remove brackets, group, simplify]**

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

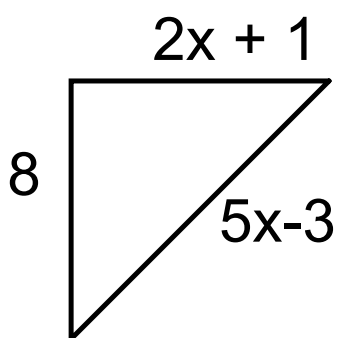
$(+) (+) = (+)$   
 $(-) (-) = (+)$   
 $(+) (-) = (-)$

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

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

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

Write a simplified expression for the perimeter.



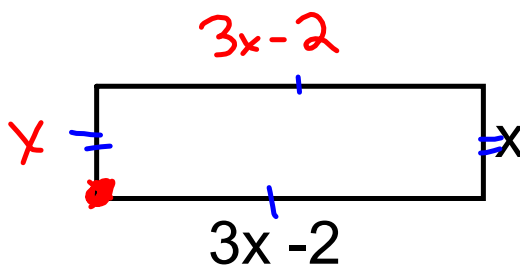
$$P = S_1 + S_2 + S_3$$

$$2x + 1 + 5x - 3 + 8$$

$$\textcircled{2}x + \textcircled{5}x + \boxed{1 - 3 + 8}$$

$$7x + 6$$

The distance around the outside of object/shape



$$P = S_1 + S_2 + S_3 + S_4$$

$$3x - 2 + x + 3x - 2 + x$$

$$\textcircled{3}x + \textcircled{x} + \textcircled{3}x + \textcircled{x} - \textcircled{2} - \textcircled{2}$$

$$8x - 4$$

## Section 5.4

### Subtracting Polynomials

What we already know how to do:

[ Remove brackets, Group, Simplify ]

$$(-2a^2 + a - 1) + (a^2 - 3a + 2)$$

$$-2a^2 + a - 1 + a^2 - 3a + 2$$

$$\begin{array}{r} \boxed{-2a^2} + \boxed{a^2} + \boxed{a} - \boxed{3a} - \boxed{1} + \boxed{2} \\ - a^2 - 2a + 1 \end{array}$$

- 1) Remove Brackets
- 2) Group
- 3) Simplify

$$(-2a^2 + a - 1) - (a^2 - 3a + 2)$$

$$-2a^2 + a - 1 - a^2 + 3a - 2$$

$$\boxed{-2a^2} \boxed{-a^2} \boxed{+a} \boxed{+3a} \boxed{-1-2}$$

$$-3a^2 + 4a - 3$$



$$(5x^2 - 3y + 2y^2) - 1(-8x^2 + 7y - 4y^2)$$

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

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

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

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

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

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

$$-11x^2 - 9y^2 + 8x$$





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#8 [a,c,e,g]

#9 [a,g]

#10 all

#17 [a,c]

*sketch*

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

Page 235  
8 [a,c,e,g]  
Page 236  
#15 a, c, e

# Page 504 Answers!

