DECEMBER 17, 2015

UNIT 4: POLYNOMIALS

SECTION 5.4: SUBTRACTING POLYNOMIALS

M. MALTBY INGERSOLL
MATH 9

WHAT'S THE POINT OF TODAY'S LESSON?

We will continue working on the Math 9 Specific Curriculum Outcome (SCO) "Patterns and Relations 6" OR PR6 which states:

PR6: "Model, record and explain the operations of addition and subtraction of polynomial expressions concretely, pictorially and symbolically (limited to polynomials of degree less than or equal to 2)."

What does THAT mean???

SCO PR6 means that we will learn how to add and subtract polynomials [numbers both with and without variables (letters)] first with pictures (algebra tiles) then without.

To SUBTRACT polynomials, add the opposite of the second polynomial (the opposite of EVERY term in the second polynomial). At this point, you simply remove the brackets separating the two polynomials and group any like terms (by adding their numerical coefficients) as well as any constants. Also, simplify the signs in "the middle".

Remember:

$+ + = +$

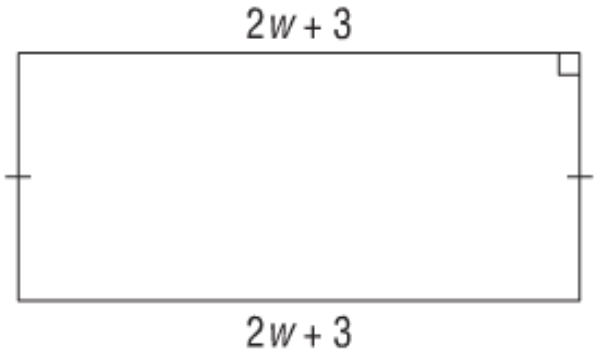
$- - = +$

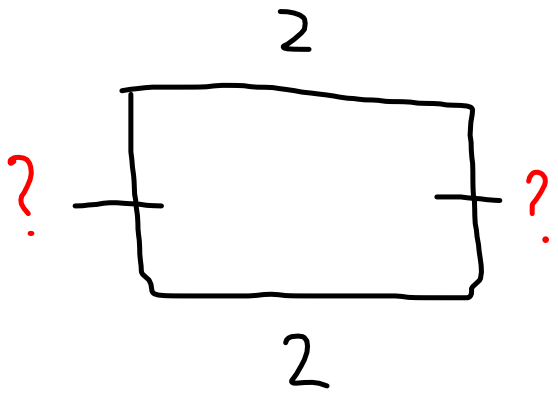
$+ - = -$

$- + = -$

HOMEWORK QUESTIONS???
(pages 234/235, #5 TO #10b)

The perimeter of the rectangle below is $6w + 14$. Determine the lengths of the unknown sides:





$P = 6$

$2 + 2$

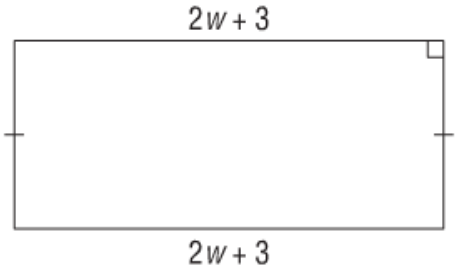
$= 4$

$6 - 4$

$= 2$

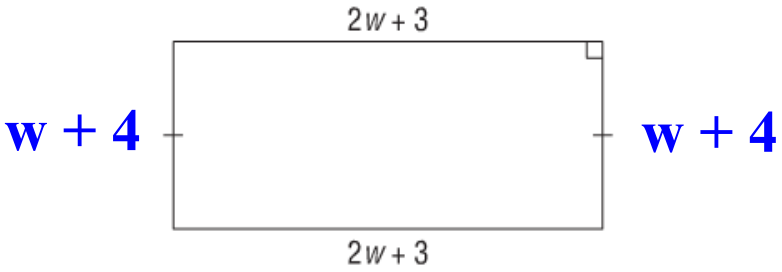
$2 \div 2$

$? = 1$



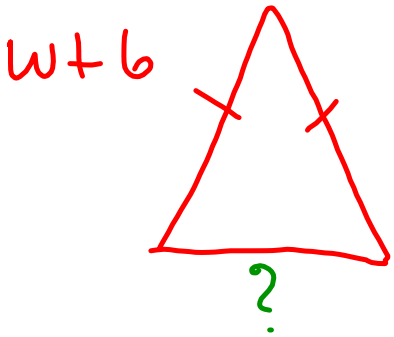
$$(6w + 14) - [(2w + 3) + (2w + 3)]$$
$$= (6w + 14) - (4w + 6)$$
$$= (6w + 14) + (-4w - 6)$$
$$= 6w + 14 - 4w - 6$$
$$= 2w + 8$$

w w 4 4



Perimeter = 6w + 14

$P = 6w + 20$



$(w+6) + (w+6)$

$= 2w + 12$

$(6w + 20) - (2w + 12)$

$= (6w + 20) + (-2w - 12)$

$= 4w + 8$

CONCEPT REINFORCEMENT:

(no need to draw algebra tiles; just do the work)

STUDY FOR FRIDAY'S QUIZ ON SECTIONS 5.1 TO 5.4!

MMS9

Page 235 : #12 and #13

Page 236 : #15 TO #17

Page 260: #14 TO #16, #18 & #19