

Curriculum Outcome

- (PR 5) Demonstrate an understanding of polynomials (limited to of degree less than or equal to 2).
- (PR 6) 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).
- (PR 7) Model, record and explain the operations of multiplication and division of polynomial expressions (limited to polynomials of degree less than or equal to 2) by monomials, concretely, pictorially and symbolically.

Student Friendly:
"Subtracting Polynomials "



1) If the sum of two polynomials is $3x^2 + 5x + 7$ and one polynomial is the following, determine the other polynomial.

a) $-7x^2 + 6x - 2$

b) $12x^2 - 18x$

2) Make two shapes that corresponds to each given perimeter

a) $P = 3x + 11$

b) $P = 12x + 10$



1) If the sum of two polynomials is $3x^2 + 5x + 7$ and one polynomial is the following, determine the other polynomial.

a) $-7x^2 + 6x - 2$

$$\begin{array}{r} + (10x^2 - 11x + 9) \\ \hline 3x^2 - 5x + 7 \end{array}$$

$$-7 + \underline{\quad} = 10$$

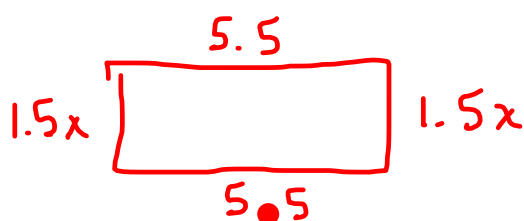
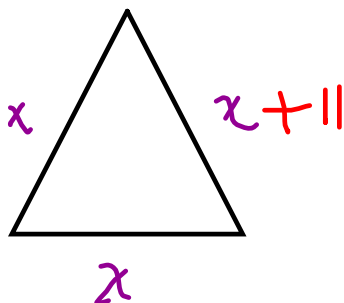
$$6 + \underline{\quad} = -11$$

b) $12x^2 - 18x$

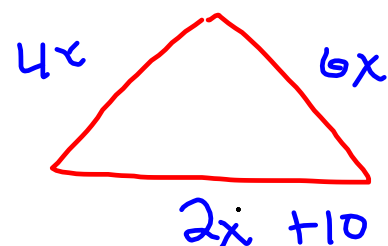
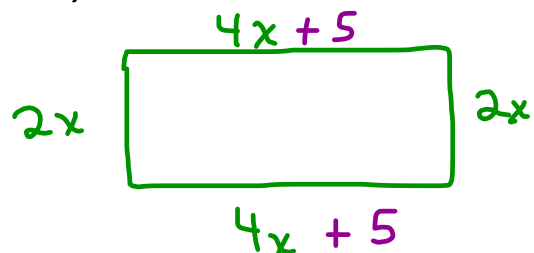
$$\begin{array}{r} + (-9x^2 + 13x + 7) \\ \hline 3x^2 - 5x + 7 \end{array}$$

2) Make two shapes that corresponds to each given perimeter

a) $P = 3x + 11$



b) $P = 12x + 10$



Class/Homework

Page 234 - 236

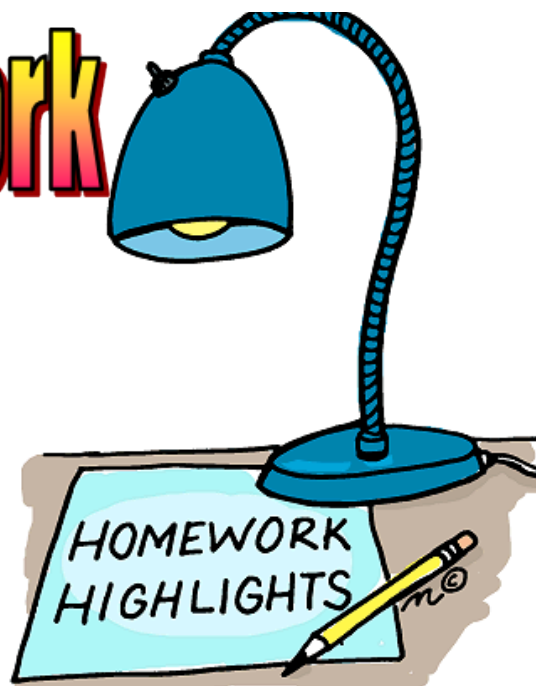
(No algebra tiles just combine like terms and subtract)

Last night

#7ac

#8 aceh

#10





1) Collect like terms and Simplify

$$a) (5x^2 - 2x + 7) + (-8x^2 + 9x - 12)$$

$$\underline{5x^2} - \underline{2x} + \underline{7} \quad - \quad \underline{8x^2} + \underline{9x} - \underline{12}$$

$$5x^2 - 8x^2 \quad - 2x + 9x \quad + 7 - 12$$

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

$$b) (12x^2 - 8xy + 5y^2) - (6x^2 - 13xy + 7)$$

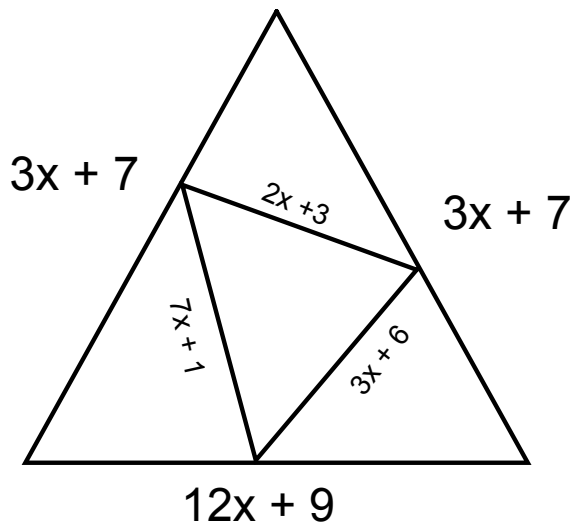
$$\underline{12x^2} - \underline{8xy} + \underline{5y^2} \quad - \quad \underline{6x^2} + \underline{13xy} - \underline{7}$$

$$12x^2 - 6x^2 \quad - 8xy + 13xy \quad + 5y^2 - 7$$

$$6x^2 + 5xy + 5y^2 - 7$$



The diagram shows one triangle inside another triangle. What is the difference in perimeter of the triangles?



Big - small
 $(18x+23) - (12x+10)$

$$18x + 23 - 12x - 10$$

$$18x - 12x + 23 - 10$$

$$P = 6x + 13$$

Big

$$P = (3x+7) + (3x+7) + (12x+9)$$

$$= 3x + 3x + 12x + 7 + 7 + 9$$

$$= 18x + 23$$

•

Small

$$P = (2x+3) + (7x+1) + (3x+6)$$

$$= 2x + 7x + 3x + 3 + 1 + 6$$

$$= 12x + 10$$

The difference of two polynomials is $-5x^2 + 3x - 8$ and one polynomial is $3x^2 - 7x + 9$, what is the other polynomial?

$$\begin{array}{r} 3x^2 - 7x + 9, \\ - (8x^2 - 10x + 17) \\ \hline -5x^2 + 3x - 8 \end{array}$$



Class/Homework

Page 234 - 236

(No algebra tiles just combine like terms and subtract)

Last night

#7ac

#8 aceh

#10

Tonight

#8bfg

#9

#12 (just correct)

#13a, b

#15 abcde

#16a

#17

