

## 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) Collect like terms and Simplify

$$\text{a) } (5x^2 - 2x + 7) + (-8x^2 + 9x - 12)$$

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

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

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

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

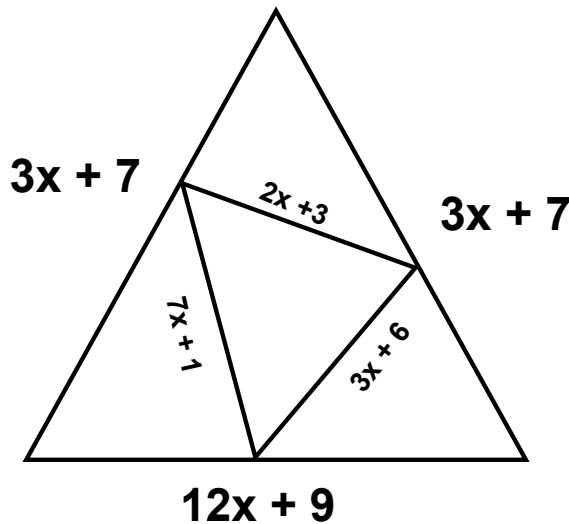
$$\cancel{12}x^2 - \cancel{8}xy + \cancel{5}y^2 - \cancel{6}x^2 + \cancel{13}xy - 7$$

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

$$\boxed{6x^2 + 5y^2 + 5xy - 7}$$



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



Big  $\Delta$

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

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

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

$$P = 18x + 23$$

Sm  $\Delta$

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

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

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

$$P = 12x + 10$$

Big - small

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

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

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

$$6x + 13$$

What polynomial is subtracted from  $3x^2 - 7x + 9$ , to give a difference of  $-5x^2 + 3x - 8$

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

$$3 - ( ) = 5$$

$$-7 - ( ) = 3$$

$$9 - ( ) = -8$$

# Class/Homework

Page 234 - 236

(No algebra tiles just combine like terms and subtract)

#7

#8

#9

#10

#12 just correct

#13a, b

#15 acd

#16a

#17

#18

Quiz Review

Mid Unit

review

-All questions