

Name: \_\_\_\_\_

8A: Algebra 1

Date: \_\_\_\_\_

Period \_\_\_\_\_

## Homework

Simplify the following

1)  $4t - 3t^2 + 5 + (-2t^2 + 3t - 5)$

2)  $a^2 + 3a + 5 + 2a^2 - 4a - 1 - 5a^2 + 2a$

3) Subtract  $5x + 3y$  from  $4x + 5y$

4) From  $5x + 3y$  subtract  $4x + y$

5) Represent the perimeter of a square whose side length is given by the binomial  $4x + 6$ 6) Represent the perimeter of a rectangle whose width is  $y$  and whose length is the binomial  $2y - 7$ 7) The perimeter of a triangle is given by the expression  $12x^2 - 4x + 15$ . Find the third side of the triangle if the other two sides measure  $4x^2 + 3$  and  $5x - 4$ .

8) By how much does  $7x + 5$  exceed  $4x - 3$ ?

9) What expression must be added to  $3x^2 - 5x + 4$  to give the result  $7x^2 - 5x - 6$ ?

10) Subtract the sum of  $2x^2 - 3x + 4$  and  $x^2 + 2x - 1$  from  $6x^2 - 2x + 1$ .

11)  $(y^2 - 4y) + (6 + 9y) - (2y^2 - 4)$

**\*\*Challenge: 12)**

Write the length of the arc  $\widehat{ABC}$  as a binomial involving  $x$ ,  $y$ , and  $z$ .

