

Name:			
Date Started:	Date Completed:	Score:	

$\label{eq:Learning Activity Sheet}$ Factoring Quadratic Trinomials in the Form $ax^2+bx+c, \\$ where a = 1

A. Solve and write your solution on the space provided for each item.

Factor each polynomial completely.

1.
$$x^2 + 12x + 27$$

2.
$$x^2 - 13x + 36$$

Factor each trinomial.

3.
$$x^2 - 13x - 48$$

4.
$$x^2 - 11x + 18$$

5. Find all possible values of k so that $x^2 + kx + 48$ is factorable.

6. Factor $x^2 + 4x + 5$, if possible.



B. For items 7-10, solve for the dimensions of a box in which the volume is equal to $(3x^3 + 3x^2 + 36x)$ cubic units.



