1<sup>st</sup> Hour Topics 2

Name:

## 070417 Quiz

1) Gina expanded a product of two factors. This was one of the lines in Gina's work.

$$2x(x+4) + 3(x+4)$$

Write the product that Gina was expanding.

2) Write the following function definitions in factored form:

a) 
$$y = x^2 - 2x + 12$$
  
b)  $y = x^2 - 11x + 18$ 

c) 
$$y = -x^2 - 4x + 12$$
  
d)  $y = 6x^2 + 17x + 5$ 

3)  $y = x^2 - 10x - 24$  can be rewritten as (rx + s)(tx + u) for certain numbers r, s, t, and u.

a) What is the product of s and u? \_\_\_\_\_ b) What is the product of r and t? \_\_\_\_\_

4) Expand each function definition. Show your work:

a) y = (2x + 7)(x - 3)b) y = (x + 2)(x + 4)c) y = (x - 1)(x - 8)

5) Here are graphs of two quadratic functions. Write the definition of each function in expanded form.



