## **Quadratics Review - Solving Quadratic Equations**

For the following problems, solve for x. Check your answers to see if they are correct.

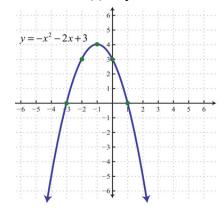
1. 
$$5x^2 + 15 = 60$$

2. 
$$x^2 + 16 = 0$$

3. Solve for x. Explain your steps. 
$$6x^2 + 8x = 0$$

4. Solve for x. Then construct a rough graph, showing the x-intercepts and y-intercept.  $x^2 - 7x + 12 = 0$ 

5. According to the graph, what are the solution(s) to y = 0?



6. According to the table, what are the solution(s) to y = 0?

X	Y <sub>1</sub>	
Particular on	00 <sup>1</sup> 0085	
X= -5		

7. Add: 
$$(3x - 5) + (x + 2)$$

8. Subtract: 
$$(3x - 5) - (x + 2)$$

9. Multiply: 
$$(3x - 5)(x + 2)$$

10. Multiply: 
$$(3x - 5)(x + 2)(x - 4)$$

11. Factor: 
$$x^3 - 2x^2 + 5x - 10$$

12. Factor: 
$$9x^2 - 16$$

13. Solve the following problem using BOTH the Quadratic Formula and Completing the Square. For this problem, which method do you prefer and why?  $x^2 - 6x + 20 = 0$