

Algebra 2
Exam 8 Review

1. Complete the table below:

Function:	Vertex:	Line of Symmetry:	Shape and orientation:	y-intercept:	x-intercepts (if any)
$y = 2(x+1)(x+3)$					
$y = x^2 + 4x - 12$					
	(2, 8)		Wide, upside down	(0, 6)	
			same as $y = x^2$		(3, 0) and (5, 0)
$y = 3x^2 - 3$					

2. Factor:

a) $x^2 + 4x + 3 =$

b) $x^2 + 7x + 10 =$

c) $x^2 - x - 12 =$

d) $x^2 + 3x - 10 =$

e) $x^2 - 7x + 6 =$

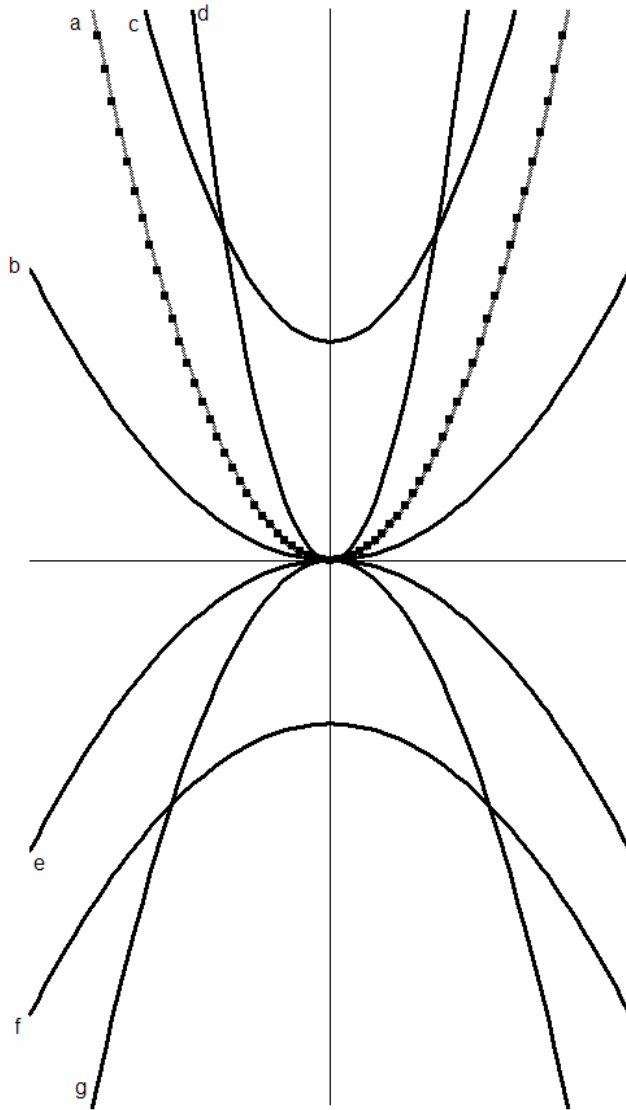
f) $x^2 - 11x + 24 =$

3. Complete this table also:

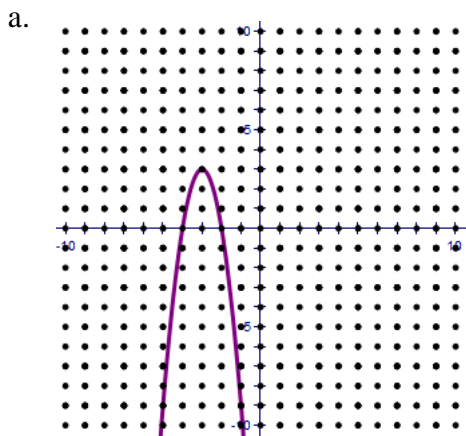
Standard Form:	Vertex Form:	Intercept Form:
		$y = 2(x-3)(x-7)$
$y = x^2 - 4x - 5$		
$y = x^2 + 8x + 12$		
	$y = -3(x-5)^2 + 12$	

4. Matching: In the graph at right, the dotted parabola represents the function $y = x^2$. Match the remaining parabolas with the functions listed below.

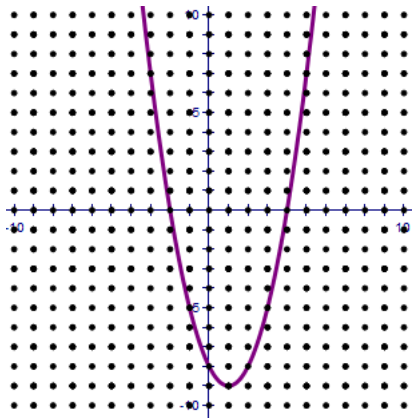
- ____ $y = x^2$
 ____ $y = 3x^2$
 ____ $y = -x^2$
 ____ $y = \frac{1}{3}x^2$
 ____ $y = -\frac{1}{3}x^2$
 ____ $y = -\frac{1}{3}x^2 - 3$
 ____ $y = x^2 + 4$



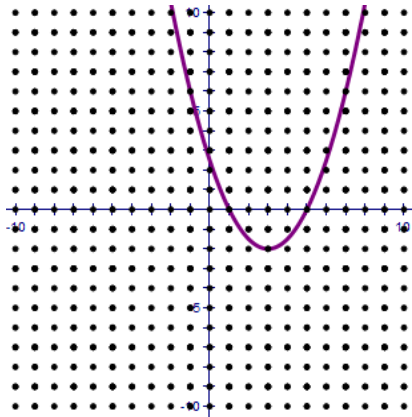
5. Write the equation for each graph below:



b.



c.



d.

