

NAME _____

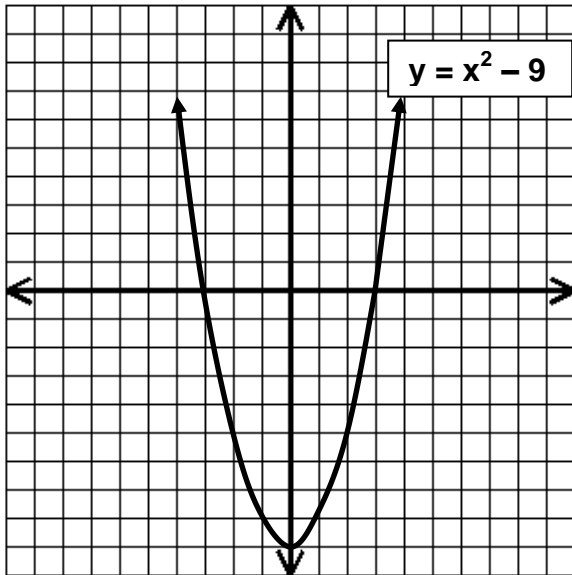
DATE _____

PER. _____

SOLVING QUADRATIC EQUATIONS BY GRAPHING

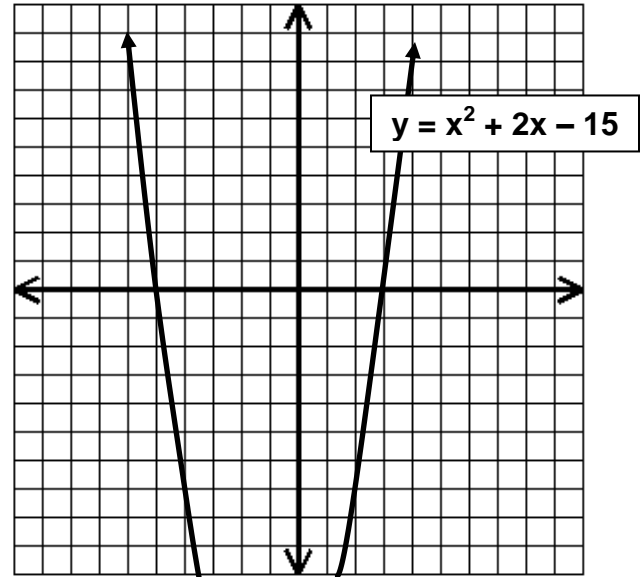
Answer the following using the graph given.

1) Solve $x^2 - 9 = 0$



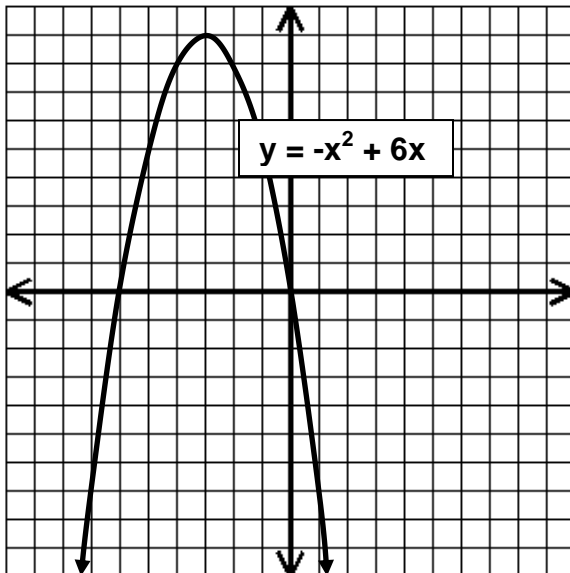
Solutions: _____

2) Find the roots of $y = x^2 + 2x - 15$



Roots: _____

3) Find the solutions that satisfy $-x^2 + 6x = 0$ using the graph below.

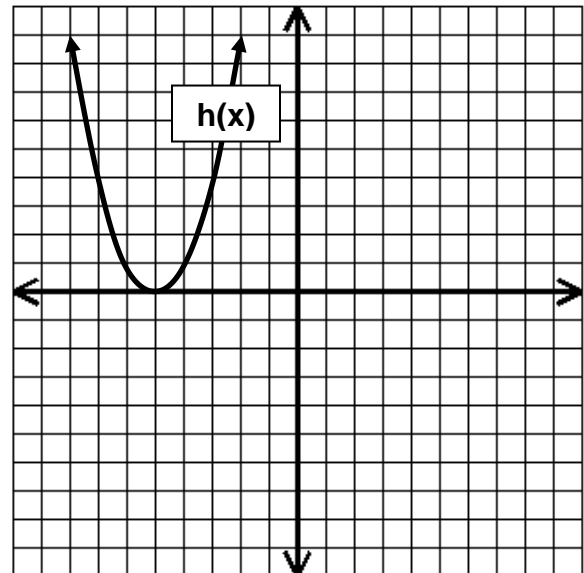


Solutions: _____

Vertex: _____ Max or Min

Domain: _____ Range: _____

4) Determine the roots of the function $h(x)$ graphed below.



Roots: _____

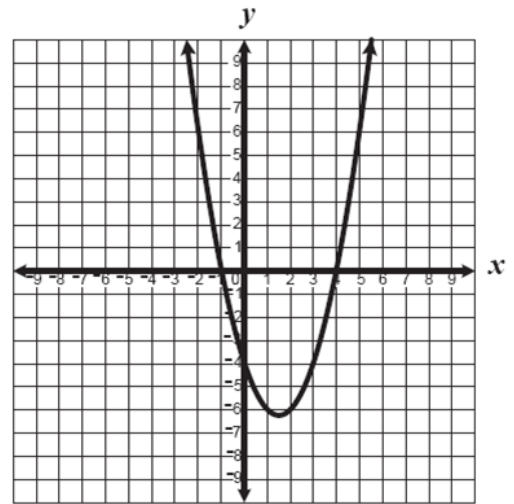
Vertex: _____ Max or Min

Domain: _____ Range: _____

5) The graph of the equation $y = x^2 - 3x - 4$ is shown below.

_____ For what value or values of x is $y = 0$?

- A. $x = -1$ only
- B. $x = -4$ only
- C. $x = -1$ and $x = 4$
- D. $x = 1$ and $x = -4$



6) The table of values for a quadratic function g is shown below. Sketch a graph of g , and answer the following questions.

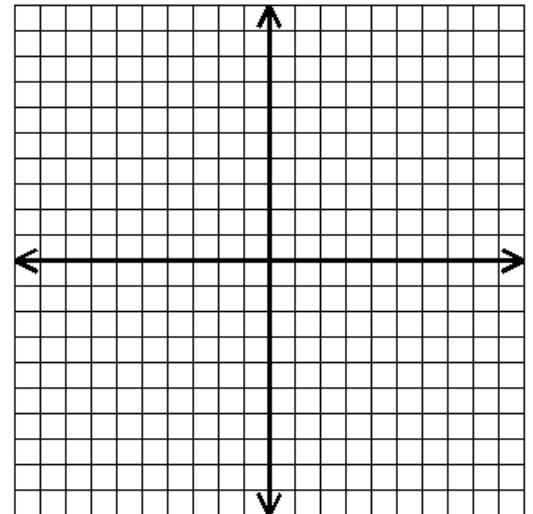
x	$g(x)$
0	-6
2	2
3	0
4	-6

Vertex: _____

Axis of symmetry: _____

Domain: _____ Range: _____

If 3 is a solution to $g(x) = 0$, what is the other solution?



7) The function $r(x) = x^2 - 4x - 5$ has zeros at -1 and 5 and a range of all real numbers greater than or equal to -9. Sketch a graph of $r(x)$.

Axis of symmetry: _____

Vertex: _____ Max or Min

x-intercepts: _____

Domain: _____ Range: _____

For what values of x does $r(x) = 0$? _____

