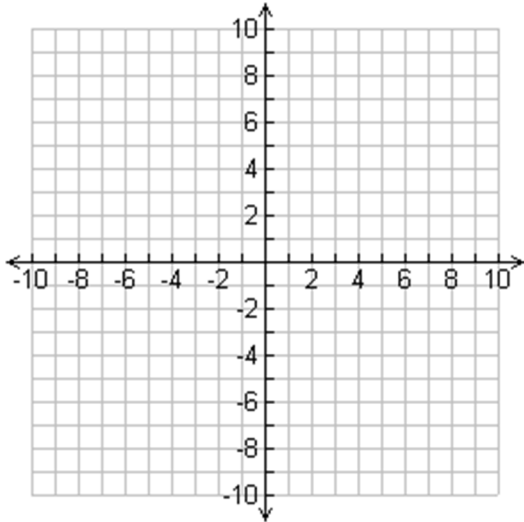


Graph each function. Give an answer for each blank.

1. $f(x) = x^2 + 2x - 3$



AOS: _____

Vertex: _____

Y-Intercept: _____

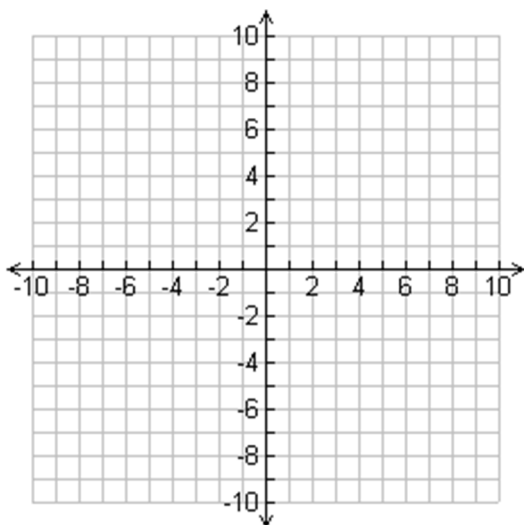
x-intercept (s): _____

Max/Min: _____

Domain: _____

Range: _____

2. $f(x) = x^2 + 4x - 4$



AOS: _____

Vertex: _____

Y-Intercept: _____

x-intercept (s): _____

Max/Min: _____

Domain: _____

Range: _____

3. $f(x) = -(x - 4)^2 - 6$

AOS: _____

Vertex: _____

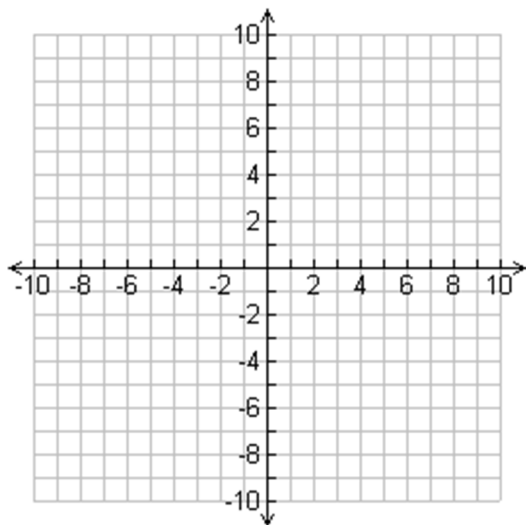
Y-Intercept: _____

x-intercept (s): _____

Max/Min: _____

Domain: _____

Range: _____



4. $y < -3x^2 + 7$

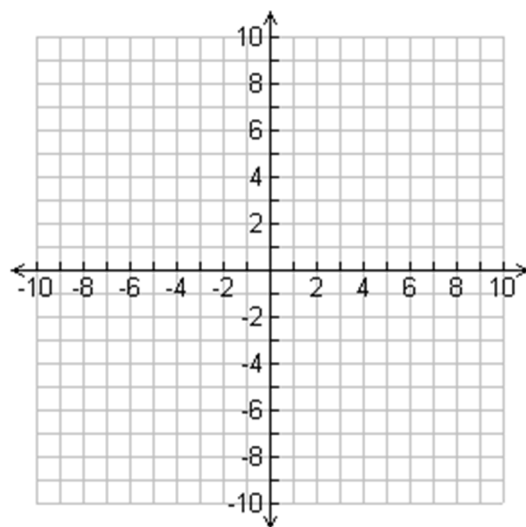
AOS: _____

Vertex: _____

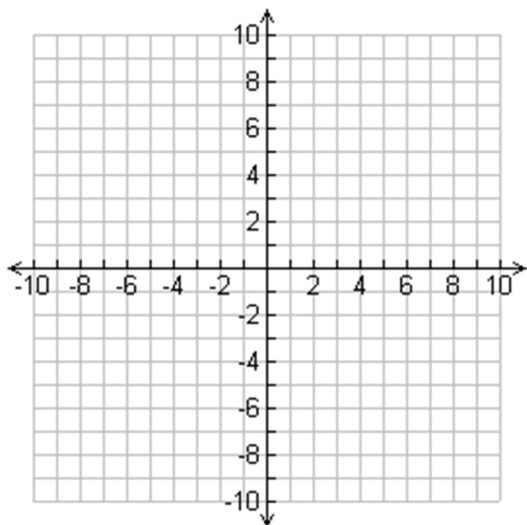
Y-Intercept: _____

dashed or solid

Don't forget to shade!



5. $y \geq (x + 3)^2 - 5$



AOS: _____

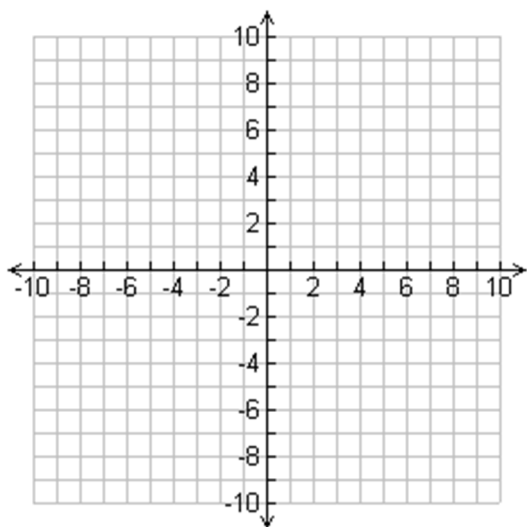
Vertex: _____

Y-Intercept: _____

dashed or solid

Don't forget to shade!

6. $y \geq 3(x - 1)(x + 3)$



AOS: _____

Vertex: _____

Y-Intercept: _____

dashed or solid

Don't forget to shade!

Determine the end behavior for the following functions.

7. $h(x) = 3x^4 - x^3 + 6x^2 - 2x + 9$

as $x \rightarrow -\infty$, $f(x) \rightarrow$ _____

as $x \rightarrow +\infty$, $f(x) \rightarrow$ _____

8. $g(x) = -5x^3 + 2x - 11$

as $x \rightarrow -\infty$, $f(x) \rightarrow$ _____

as $x \rightarrow +\infty$, $f(x) \rightarrow$ _____

9. $h(x) = -x^6 + 2x^4 + 3x + 9$

as $x \rightarrow -\infty$, $f(x) \rightarrow$ _____

as $x \rightarrow +\infty$, $f(x) \rightarrow$ _____

10. $g(x) = 6x^5 + 2x^4 + 5x^3 + 4$

as $x \rightarrow -\infty$, $f(x) \rightarrow$ _____

as $x \rightarrow +\infty$, $f(x) \rightarrow$ _____

Graph the polynomial.

11.

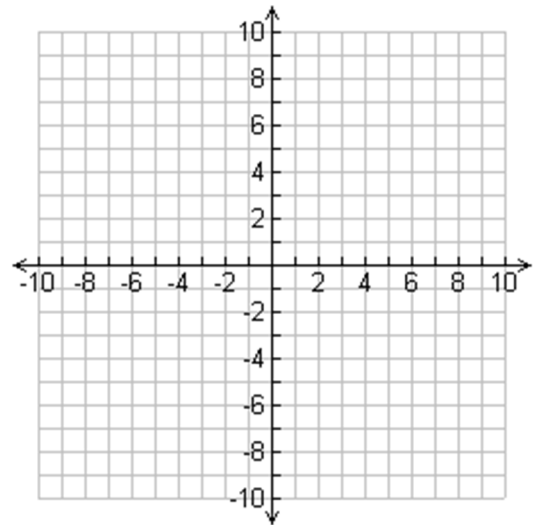
$f(x) = 2x^4 - 18x^3 - 8x^2 + 72x$

y-intercept: _____

x-intercept (s): _____

as $x \rightarrow -\infty$, $f(x) \rightarrow$ _____

as $x \rightarrow +\infty$, $f(x) \rightarrow$ _____



Convert the function into the missing form.

	Standard	Vertex	Intercept
12.			$(x + 3)(x - 5)$
13.	$2x^2 + 4x - 6$		
14.		$2(x + 5)^2 - 8$	

Fill in the table with the requested values.

	y intercept	vertex	AOS
12.			
13.			
14.			