Pre-Calculus w/Trig Peto
Quadratic Review Worksheet Day 07

Name _____
Date _____ Period _____

OBJECTIVE: *You will be able to operate on quadratic functions, find the inverse of quadratic functions, and graph quadratic functions.*

Find the following characteristics of each quadratic:

a. vertex
b. axis of symmetry
c. y-intercept
d. x-intercept(s)

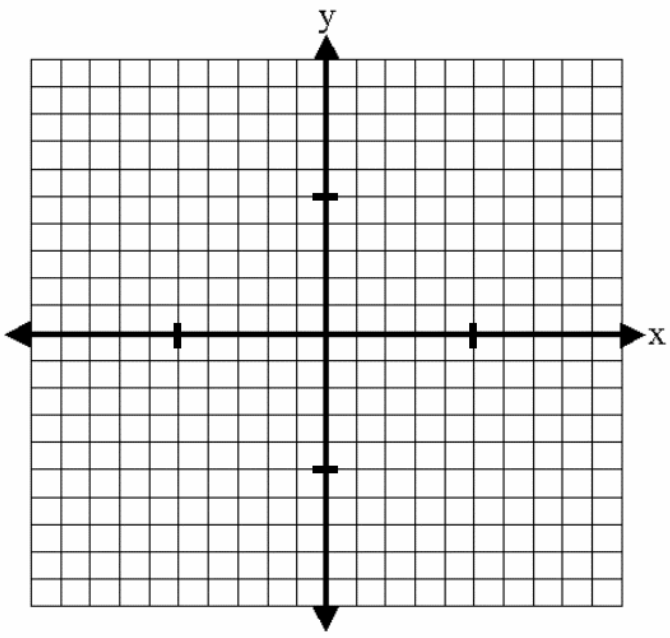
1. $f(x)=\frac{1}{4}x^2-6x+2$

a.

b.

c.

d.



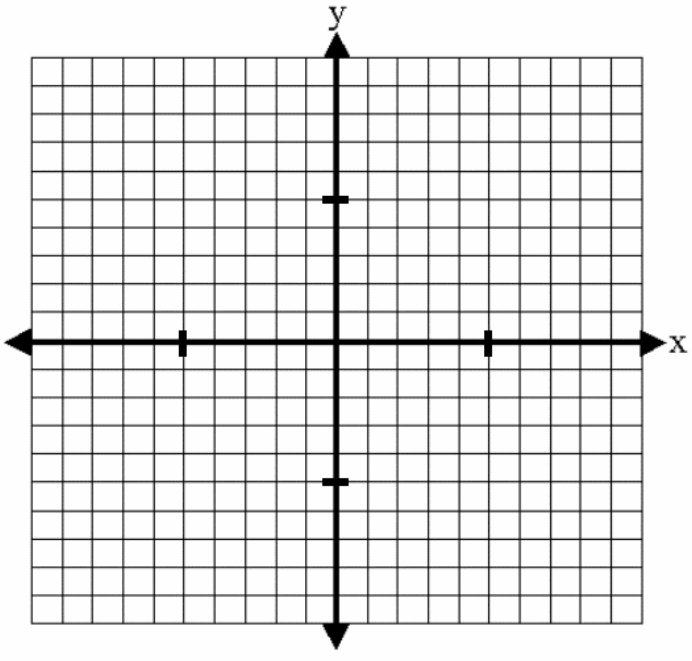
2. $g(x)=3x^2-4x-7$

a.

b.

c.

d.



3. $h(x) = -2x^2 + 8$

a.

b.

c.

d.

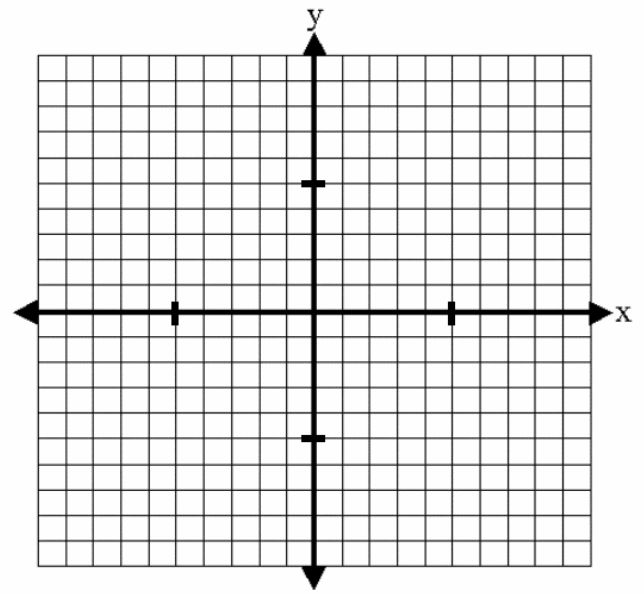
4. $j(x) = \frac{1}{2}x^2 + 5$

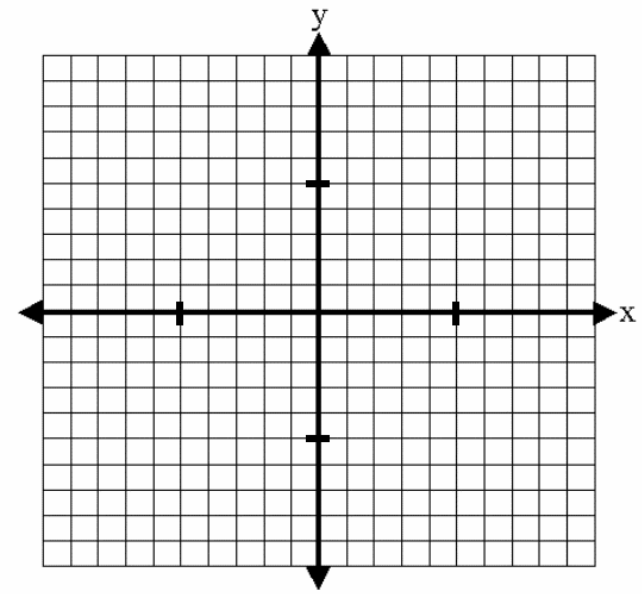
b.

b.

c.

d.





5. If $f(x) = -2x^2 + 5x - 1$ *and* $g(x) = 3x - 1$ then find:

a. $f(g(x))$

b. $g(f(x))$

6. If $f(x)=\frac{1}{3}x^2-2x$ *and* $g(x)=2x+10$ then find:

a. $f(g(x))$ b. $g(f(x))$

7. Find the inverse of the function $f(x)=-2x^2+98$.

8. Find the inverse of the function $f(x)=\sqrt{2x-7}+3$.

9. Solve:

a. $2x^2=5x+7$ b. $4x^2=64$ c. $3(x-7)^2=81$