Mod 2 Test Review 2

Math 2

1) $f(x) = x^2 + 13x - 14$

Factored form:

Vertex form:

Vertex: _____

Equation of Axis of Sym._____

Y-intercept: _____

x-intercept(s): _____

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

Factored form:

Vertex form:

Vertex: _____
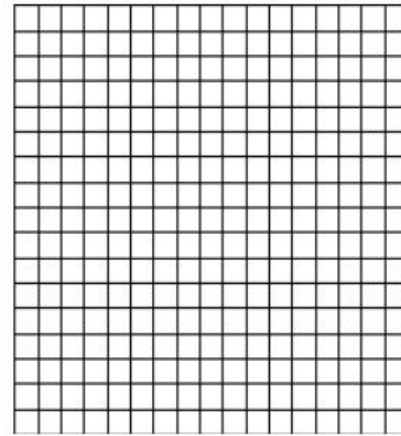
Eq. of Axis of Sym._____

y-intercept: _____

x-intercepts _____

3) $f(x) = \frac{1}{2}(x + 4)(x - 2)$

x-intercepts: _____

y-intercept: _____
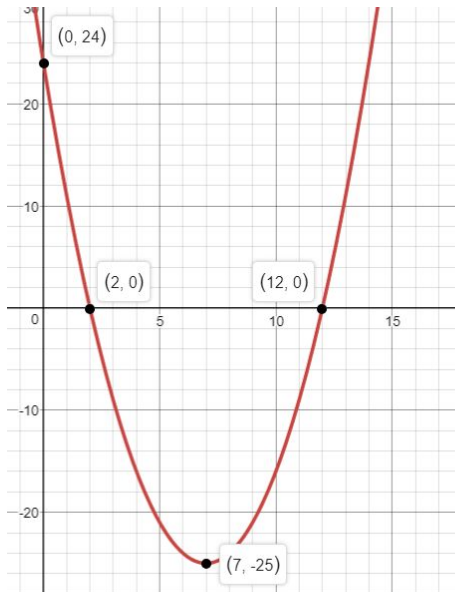
Vertex: _____

Equation of Axis of sym._____

Graph:

4) Factor: $x^2 + 10x - 75$

5) Factor: $4x^2 + 8x - 5$

6) Factor: $3x^2 - 75$

7) Use the graph to write the equation in:

(0, 24)

20

10

(2, 0)   (12, 0)

0   5   10   15

-10

-20

(7, -25)

Vertex form: _____

Factored form: _____

Standard form: _____

8) In a basic square, one side was increased by 1 and the other side was increased by 3, and finally, the area was multiplied by 3. Write the equation in:

a) Factored form:

b) Standard form:

c) Vertex form:

d) Describe the transformation to obtain this graph from the parent graph $f(x) = x^2$.