AGS 2 – Module 03B
Review #2

Name_____
Period_____

You need to show all your work.

1. Simplify each radical. State if the solution is a real solution or an imaginary solution.

a) $\sqrt{45}$

b) $\sqrt{-8}$

c) $-2\sqrt{28}$

d) $\sqrt{150}$

2. Solve each equation by taking the square root. If the solutions are imaginary, state this.

a) $2(x-1)^2 = 28$

b) $2(x+5)^2 + 32 = 120$

c) $x^2 - 24 = 40$

d) $(x-10)^2 = -144$

3. Solve each equation completing the square.

a) $x^2 + 12x - 5 = 0$

b) $x^2 - 2x = 17$

c) $x^2 + 10x + 16 = 0$

d) $x^2 = 8x - 18$

4. Solve each equation by factoring. Remember to set each equation equal to zero first.

a) $x^2 + 6x = 0$

b) $2x^2 + 7x + 3 = 0$

c) $x^2 - 25 = 0$

d) $x^2 + 14x = -33$

e) $x^2 - 10x + 21 = 0$

f) $3x^2 = 14x + 5$

5. Solve each equation by quadratic formula. Remember to set each equation equal to 0 first.

a) $2\,x^2 + 3x - 4 = 0$

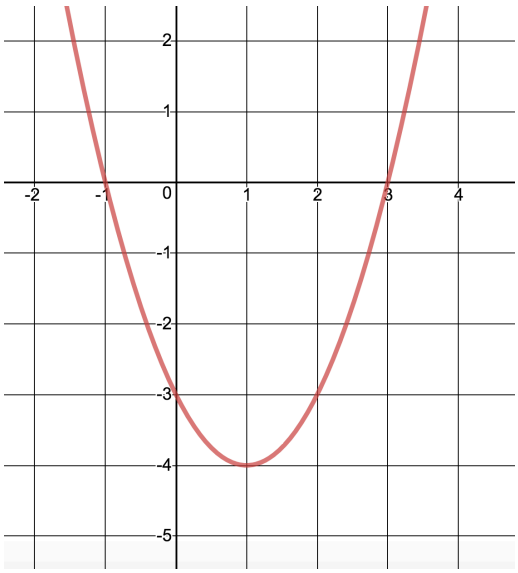
b) $3x^2 + 13x = 56$

c) $x^2 + 10x = -1$

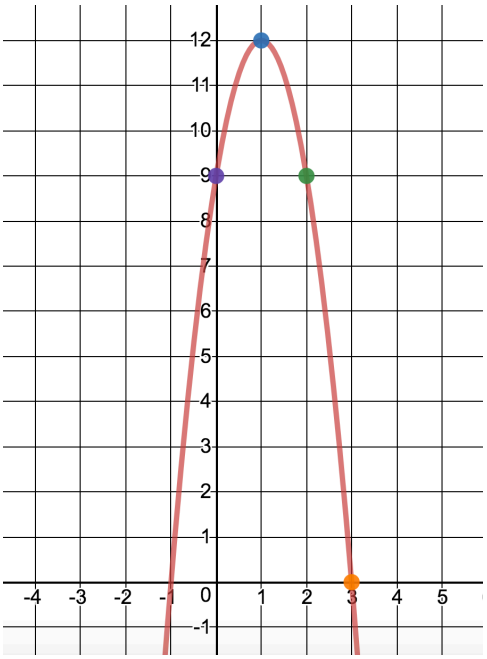
d) $x^2 + 2x + 10 = 0$

6. Write the equation for each graph 3 different way, if possible. Use Standard Form, Vertex Form, and Factored Form. Then state the x-intercepts

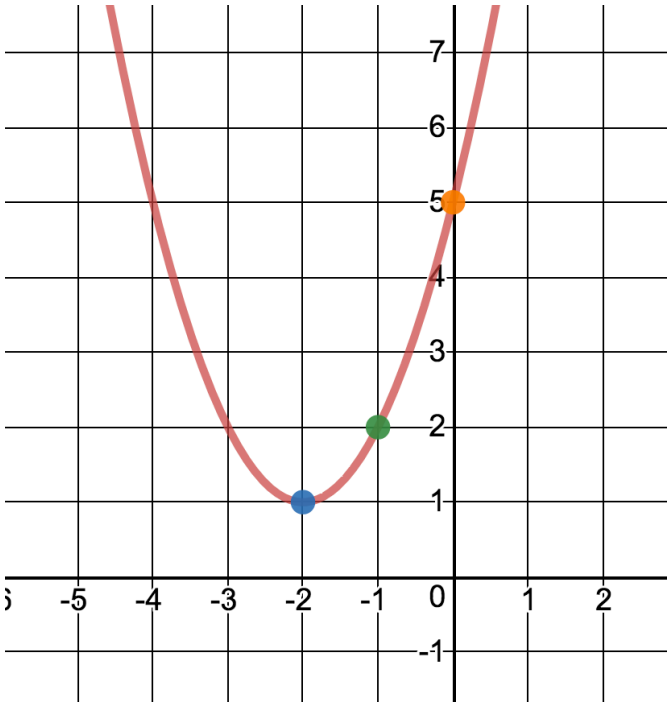
a)



b) Hint: The A-value is not 1



c)



d) (Hint: the A value is less than 1)