

Name _____

Period _____ Date _____

Homework 5.1.3

1. Compare the two equations below.

i. $(x+2)(x-1)=0$

ii. $(x+2)+(x-1)=0$

a. How are the equations similar? How are they different?

b. Solve both equations.

2. Solve each equation below using the Zero Product Property.

a. $(x-2)(x+8)=0$

b. $(3x-9)(x-1)=0$

c. $(x+10)(2x-5)=0$

d. $(x-7)^2=0$

3. The x-intercepts of the graph of $y=2x^2-16x+30$ are (3,0) and (5,0).

a. What is the x-coordinate of the vertex? How do you know?

b. Use your answer to part (a) above to find the y-coordinate of the vertex. Then write the vertex as a point (x,y).

4. Solve for x in the diagram at below.

