Honors Math II
Unit 6 day 3

Name_____
Period_____Date_____

Solve.

1. $3x^2 + 7x - 9 = 15$

2. $5x^2 - 17x - 12 = 0$

3. $x^3 + 2x^2 = 4x + 8$

4. $2x^2 + 8x = 0$

5. $2(x-4)^2 + 8 = 10$

6. $8x^2 + 22x + 15 = 0$

Solve the following systems.

7. $x - 3y + 3z = -4$
$2x + 3y - z = 15$
$4x - 3y - z = 19$

8. $4x + 2y - 2z = 10$
$2x + 8y + 4z = 32$
$30x + 12y - 4z = 24$

9. $11x - y = 11$
$y - z = 11$
$x + 12z = 2$

10. $x - 2y - 2z = 9$
$x + y + z = -9$
$x - 4y - 4z = 21$

11. $4x - 3y + 5z = -19$
$3x - y - 8z = -21$
$-2x + y + 3z = 13$

12. $2x - 2y + z = 7$
$4x - 4y + 2z = 17$
$3x + 2y - 6z = -2$

13. $4x + 2y + 3z = 11$
$x - 2y + z = 6$
$2x + y + 2z = 7$

14. If the three sides of a triangle x, y, and z are related by the system of equations. What type of triangle is formed? What are the lengths of the sides?

$2x - y + z = 14$
$x + y = 14$
$2y - z = 7$