

Algebra 2
3.4 Homework

Name: _____

Solve each system of equations.

$$2x - y + 2z = 15$$

1. $-x + y + z = 3$

$$3x - y + 2z = 18$$

$$2x - 5y + z = 5$$

2. $3x + 2y - z = 17$

$$4x - 3y + 2z = 17$$

$$4x + y + 5z = -9$$

3. $x - 4y - 2z = -2$

$$2x + 3y - 2z = 21$$

$$2x - 2y - 4z = -2$$

4. $3x - 3y - 6z = -3$

$$-2x + 3y + z = 7$$

5. The sum of three numbers is 6. The third number is the sum of the first and second numbers. The first number is one more than the third number. Find the numbers.

6. Alexandria High School scored 37 points in a football game. Six points are awarded for each touchdown. After each touchdown, the team can earn one point for the extra kick or two points for a 2-point conversion. The team scored one fewer 2-point conversions than extra kicks. The team scored 10 times during the game. How many touchdowns were made during the game?