Systems of Linear Equations in Three Variables

1. Determine whether the given ordered triple is a solution of the system
(similar to p.503 #2)

$$(3,-1,2)$$
$$5x - y + z = 18$$
$$7x + 3y - 2z = 14$$
$$x + y + z = 4$$

2. Solve each system
(similar to p.503 #6)

$$2x + 3y - z = 8$$
$$5x - y + 2z = 17$$
$$x + 7y + z = 28$$

3. Solve each system
(similar to p.503 #12)

$$2x + z = 13$$
$$x + 3y - z = 14$$
$$3x - 7y + z = 14$$

4. Solve each system
(similar to p.503 #18)

$$4z - 27 = 5(x - 2y)$$
$$2y - z - 4 = -3x$$
$$-16 + 6z = 2(-x + y)$$