Solving linear equations and inequations

1. Solve these equations:

    (a) $x + 5 = 3$ **(b)** $y - 4 = 1$ **(c)** $z + 3 = -2$ [1, 1, 1]

2. Solve these equations:

    (a) $5x = 20$ **(b)** $3z = 15$ **(c)** $2y = 1$ [1, 1, 1]

3. Solve these equations:

    (a) $2x - 12 = -3$ **(b)** $5z + 9 = 4$ **(c)** $6y - 9 = 2y + 5$

    (d) $8k - 5 = 5k + 1$ **(e)** $6(a - 1) = 4(a + 2)$ **(f)** $6x + 11 = 9x + 2$

                                                                                [2, 2, 2, 2, 3, 2]

4. Solve these equations:

    (a) $7x + 7 = 5x - 11$ **(b)** $3x + 13 = 9 - 5x$ **(c)** $4x - 8 = 6x - 14$

                                                                                [2, 2, 2]

5. Solve these inequalities:

    (a) $7x > 42$ **(b)** $5x - 3 \leq 22$ **(c)** $3x - 2 > -11$ [1, 2, 2]

                                                                                         [30 marks]