ASSIGNMENT #7 Linear Equations /55

**1.** Solve each equation. SHOW YOUR WORK!!! *(16 marks)*

**a)**  **b)**  **c)** 3*x* = 0.6 **d)** 

**e)**  **f)**  **g)** –4.5*x* = 1.35 **h)** 

**i)**  **j)** 4*x* – 7 = 29 **k)** –4*x* = –4.96 **l)** 

**m)**  **n)**  **o)**  **p)** 

**2.** Show a check for each of the following. *(3 marks)*

**a)** 3(*x* – 5) = 18 **b)** 0.2(*x* + 3) = 1.4 **c)** 

*x* = 4 *x* = 11 *x* = 

**3.** CIRCLE the error in each of the following. Then, write the correct solution. *(4 marks)*

**a)** 0.4(*x* + 2.2) = 5.4 **b)**  = 

0.4 *x* + 2.2 = 5.4  = 

0.4 *x* = 3.2  = 

*x* = 8 *x* = 

**4.** Solve each equation. SHOW YOUR WORK!!! *(8 marks)*

**a)**  **b)** 1.3*m* + 64.2 = 2.7*m* +12.82

**c)** 5*n* – 6.4 = 3*n* + 2.6 **d)** 

**e)**  **f)** 1.2*m* – 17 = 8 + 0.7*m*

**g)**  **h)** 0.3(2*x* – 1) – 2.3 = 0.04(*x* + 5)

5. Solve each equation. SHOW YOUR WORK!!! *(16 marks)*

1. 1.2 = + 5.1 c. 3.6(2a – 1) = 1.2(a + 3)

1. (5 – 3t) = (t – 2) d.

**e)** 2(*x* – 4) = 12 **f)** 3(*m* + 0.5) = –2.1 **g)** 1.2(*x* + 1.3) = 2.4

**h)**  **i)**  **j)** 

**k)** 0.4*x* = 5.58 – 0.2*x* **l)** 7.2 + 2.3*x* = 3.2*x* **m)** 

**n)**  **o)**  **p)** 1.4*m* = 1.5*m* – 0.57

**4.** Create an equation for each of the following. Solve your equation. Then, check your solution.

**a)** The length of a rectangular garden is 1 m more than three times the garden’s width. If the perimeter of the garden is 34 m, find its dimensions. *(2 marks)*

**b)** The cash register in the school canteen contains *x* quarters and (30 – *x*) dimes. If the total value of the coins is $5.85, how many of each kind of coin are there? *(2 marks)*

**c)** An employee mixes peanuts worth $2.80/kg with cashews worth $3.60/kg. She sells the mixture for $3.12/kg. If she has 75 kg of peanuts, how many kilograms of cashews does she need? *(2 marks)*

**d)** Plane A leaves the airport. One hour later, Plane B leaves the same airport on the same course. It catches up to Plane A in  h. The average speed of Plane B is 300 km/h faster than Plane A. Find the speed of each plane. *(2 marks)*