

Time: 15:50
 Date: 3/11/2020
 Module code: ACHA 3000
 Student ID: 2005263

$$(Q4) \quad x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$

$$14x^2 + 3x = 11$$

$$14x^2 + 3x - 11 = 0$$

$$\begin{matrix} a & b & c \\ 14x^2 + 3x - 11 = 0 \end{matrix}$$

$$x = \frac{-3 \pm \sqrt{3^2 - 4(14)(-11)}}{2(14)}$$

$$x = \frac{-3 \pm \sqrt{9 + 616}}{28}$$

$$x = \frac{-3 \pm \sqrt{625}}{28}$$

$$x = \frac{-3 \pm 25}{28}$$

$$x = \frac{-3 + 25}{28}$$

$$x = \frac{11}{14}$$

$$x = 0.79$$

$$x = \frac{-3 - 25}{28}$$

$$x = -1$$

$$Q5) \quad 5x + 3y = 39 \quad (i)$$

$$8x - 2y = 42 \quad (ii)$$

$$10x + 6y = 78 \quad (iii)$$

$$24x - 6y = 126 \quad (iv)$$

$$34x = 204$$

$$x = \frac{204}{34}$$

$$x = 6$$

$$5(6) + 3y = 39$$

$$30 + 3y = 39$$

$$3y = 39 - 30$$

$$3y = 9$$

$$y = \frac{9}{3}$$

$$y = 3$$