$$4x + 3y = 17 \quad \mathbf{0}$$
$$x + 2y = 5$$

Show clear algebraic working.

$$x = 5 - 2y - 2$$

$$x = \frac{3.8}{y} = \frac{0.6}{(3)}$$

(Total for Question 1 is 3 marks)

$$3x + 5y = 6$$
  
 $7x - 5y = -11$  — (1)  $x = 6-5y$  — (2)

Show clear algebraic working.

substitute (2) into (1):

$$42 - 35y - 15y = -33$$
  
-50 y = -33 - 42  $\rightarrow$  42

$$\div 50 \left( \begin{array}{c} -50 \text{ y } = -75 \text{ } \bigcirc \\ \text{y } = \frac{-75}{-50} = 1.5 \text{ } \bigcirc \\ \end{array} \right)$$

$$\chi = \underbrace{6 - 5(1.5)}_{3}$$

$$z - 0.5 \quad \text{(1)}$$

$$x = \frac{-0.5}{y}$$

$$y = \frac{1.5}{y}$$

(Total for Question 2 is 3 marks)

$$5a + 2c = 10$$
 — ①  
 $2a - 4c = 7$   
 $a - 2c = \frac{7}{2}$  — ②

Show clear algebraic working.

substitute (2) into (1):

$$5\left(\frac{7}{2}+2c\right)+2C=10$$

$$\frac{35}{2}$$
 + 10 C + 2C = 10

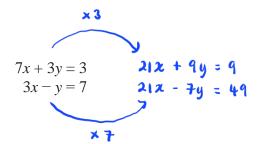
$$\frac{35}{2} + 12C = 10$$

$$12C = 10 - \frac{35}{2} \text{ (i)}$$

$$c = \frac{-7.5}{12}$$

$$a = \frac{7}{2} + 2(-0.625)$$

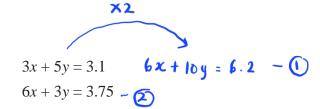
(Total for Question 3 is 3 marks)



Show clear algebraic working.

16 
$$y = -40$$
  
 $y = -\frac{40}{16}$   
 $z - 2.5$   
 $3x + 2.5 = 7$  (1)  
 $3x = 4.5$   
 $x = \frac{4.5}{3} = 1.5$   
 $x = \frac{-2.5}{3}$ 

(Total for Question 4 is 3 marks)



Show clear algebraic working.

## By elimination:

(1) - (2) :
$$10 y - 3y = 6 \cdot 2 - 3 \cdot 75$$

$$7y = 2 \cdot 45$$

$$y = 0 \cdot 35$$

$$3x + 5(0.35) = 3.1$$
 (1)  
 $3x + 1.75 = 3.1$   
 $3x = 1.35$ 

2 = 0.45

$$x = \frac{0.45}{0.35}$$

$$y = \frac{0.35}{0.35}$$

(Total for Question 5 is 3 marks)

$$x + 2y = 15$$
 **x** = 15 - 2y - (1)  $4x - 6y = 4$  (2)

Show clear algebraic working.

$$x = \frac{7}{4}$$

$$y = \frac{4}{3}$$

$$5x + 4y = -2$$

$$2x - y = 4.4$$

Show clear algebraic working.

$$5x + 4(2x - 4.4) = -2$$
 $5x + 8x - 17.6 = -2$ 
 $13x = 15.6$ 
 $x = \frac{15.6}{13}$ 
 $= 1.2$ 
 $y = 2(1.2) - 4.4$ 
 $= 2.4 - 4.4$ 

$$x = \dots$$

$$y = \dots$$

$$2x + 9y = 14.5 - 1$$

$$7x + 3y = 8$$

$$21x + 9y = 24$$

Show clear algebraic working.

$$21 \times -2 \times +9 y -9 y = 24 - 14.5$$

$$19 \times = 9.5$$

$$2 = \frac{9.5}{19} = \frac{1}{2}$$

$$2(\frac{1}{2}) + 9y = 14.5$$

$$1 + 9y = 14.5$$

$$9y = 13.5$$

$$9 = \frac{13.5}{9} = 1.5$$

$$x = \frac{0.5}{1.5}$$

$$y = \frac{1.5}{1.5}$$

(Total for Question 8 is 3 marks)