1. Solve the simultaneous equations

$$3x + 2y = 4 \qquad \times 4$$
$$4x + 5y = 17 \qquad \times 3$$

$$12x + 8y = 16$$
$$\overline{12x + 15y = 51}$$

$$7y = 35$$
$$y = 5$$

$$3x + 2(5) = 4$$
$$3x + 10 = 4$$
$$3x = -6$$
$$x = -2$$

$x = \dfrac{-2}{}$

$y = 5$

(4 marks)

2. Solve the equations

$$3x + 5y = 19 \quad \times 4$$
$$4x - 2y = -18 \quad \times 3$$

$$12x + 20y = 76$$
$$12x - 6y = -54$$

$$26y = 130$$
$$y = 5$$
$$3x + 5(5) = 19$$
$$3x + 25 = 19$$
$$3x = -6$$
$$x = -2$$

$x = $ .... -2 ....

$y = $ .... 5 ....

(4 marks)

3. Solve the simultaneous equations

$$3x + 4y = 200 \quad \times 2$$
$$2x + 3y = 144 \quad \times 3$$

$$6x + 8y = 400$$
$$6x + 9y = 432$$
$$y = 32$$

$$3x + 4(32) = 200$$
$$3x + 128 = 200$$
$$3x = 72$$
$$x = 24$$

$x =$ ....**24**.........

$y =$ ....**32**.........

(4 marks)

4. Solve the simultaneous equations

$$5x + 2y = 11 \quad \times 3$$
$$4x - 3y = 18 \quad \times 2$$

$$15x + 6y = 33$$
$$8x - 6y = 36$$

$$23x = 69$$
$$x = 3$$

$$5(3) + 2y = 11$$
$$15 + 2y = 11$$
$$2y = -4$$
$$y = -2$$

$x =$ ....3.................................

$y =$ ....-2.......................

(4 marks)

5. Solve the simultaneous equations

$$4x - 3y = 11 \quad \times 2$$
$$10x + 2y = -1 \quad \times 3$$

$$8x - 6y = 22$$
$$+ \quad + \quad +$$
$$30x + 6y = -3$$

$$38x \quad = 19$$
$$x = 0.5$$

$$4(0.5) - 3y = 11$$
$$2 - 3y = 11$$
$$2 = 11 + 3y$$
$$-9 = 3y$$
$$-3 = y$$

$x = $ .....0.5.....

$y = $ .....-3.....

(4 marks)

6. Solve the simultaneous equations

$$3x + 7y = 26 \quad \times 4$$

$$4x + 5y = 13 \quad \times 3$$

$$12x + 28y = 104$$
$$12x + 15y = 39$$
$$13y = 65$$
$$y = 5$$

$$3x + 7(5) = 26$$
$$3x + 35 = 29$$
$$3x = -9$$
$$x = -3$$

$x =$ ...... -3 ......

$y =$ ...... 5 ......

(4 marks)

7. Solve the simultaneous equations

$$6x - 2y = 33 \quad \times 2$$

$$4x + 3y = 9 \quad \times 3$$

$$12x - 4y = 66$$
$$12x + 9y = 27$$
$$13y = -39$$
$$y = -3$$

$$4x + 3(-3) = 9$$
$$4x - 9 = 9$$
$$4x = 18$$
$$x = \frac{18}{4} = \frac{9}{2} = 4.5$$

$x = \underline{4.5}$

$y = \underline{-3}$

(4 marks)