

1. (a) Solve the equation $5x = 35$

$$x = 35 \div 5$$

$$\text{Answer } x = 7$$

(1)

- (b) Solve the equation $x - 7 = 35$

$$x = 35 + 7$$

$$\text{Answer } x = 42$$

(1)

(Total 2 marks)

2. Solve the equations.

- (a) $3x = 21$

$$x = 21 \div 3$$

$$\text{Answer } x = 7$$

(1)

- (b) $y - 2 = 9$

$$y = 9 + 2$$

$$\text{Answer } y = 11$$

(1)

- (c) $4z - 1 = 9$

$$4z = 10$$

$$z = 2.5$$

$$\text{Answer } z = 2.5$$

(2)

- (d) $3t + 4 = 20 + t$

$$3t - t + 4 = 20$$

$$2t = 20 - 4$$

$$2t = 16$$

$$t = 16 \div 2 \quad \text{Answer } t = 8$$

(3)

(Total 7 marks)

3. (a) Solve the equations

(i) $2x = 24$

$$x = 24 \div 2$$

Answer $x = 12$

(1)

(ii) $y - 9 = 11$

$$y = 11 + 9$$

Answer $y = 20$

(1)

(iii) $\frac{z}{4} = 8$

$$z = 8 \times 4$$

Answer $z = 32$

(1)

(iv) $4w + 3 = 13$

$$4w = 10$$

$$w = 2.5$$

Answer $w = 2.5$

(2)

(Total 6 marks)

4. Solve these equations

(a) $4x - 7 = 5$

$$4x = 12$$

$$x = 12 \div 4$$

Answer $x = 3$

(2)

(b) $2(y + 5) = 28$

$$2y + 10 = 28$$

$$2y = 18$$

Answer $y = 9$

(3)

(c) $7z + 2 = 9 - 3z$

$$10z + 2 = 9$$

$$10z = 7$$

$$z = 0.7$$

Answer $z = 0.7$

(3)

(Total 8 marks)

5. Solve the equations

(a) $8z - 5 = 11$

$$8z = 16$$

$$z = 16 \div 8$$

Answer $z = 2$

(2)

(b) $3(w - 2) = 9$

$$3w - 6 = 9$$

$$3w = 15$$

$$w = 15 \div 3$$

Answer $w = 5$

(3)

(Total 5 marks)

6. Solve the following equations.

(a) $2x + 5 = 3$

$$2x = -2$$

$$x = -2 \div 2$$

Answer $x = -1$

(2)

(b) $4(y - 3) = 18$

$$4y - 12 = 18$$

$$4y = 30$$

$$y = 30 \div 4$$

Answer $y = 7.5$

(3)

(c) $\frac{z+4}{2} = 11$

$$z + 4 = 22$$

$$z = 22 - 4$$

Answer $z = 18$

(2)

(Total 7 marks)

7. Solve the equation $5x + 4 = 3x + 7$

$$2x + 4 = 7$$

$$2x = 3$$

$$x = 3 \div 2$$

Answer $x = 1.5$

(Total 3 marks)

8. In the table below, the letters w, x, y and z represent different numbers. The total of each row is given at the side of the table.

①	w	w	w	w	24
②	w	w	x	x	28
③	w	w	x	y	25
④	w	x	y	z	23

Find the values of w, x, y and z .

$$\textcircled{1} 4w = 24 \quad \textcircled{2} 2w + 2x = 28 \quad \textcircled{3} 2w + x + y = 25 \quad \textcircled{4} w + x + y + z = 23$$

$$w = 6 \quad 12 + 2x = 28 \quad 16 + 6 + y = 25 \quad 6 + 8 + 3 + z = 23$$

$$2x = 16 \quad y = 3 \quad z = 6$$

Answer $w = 6, x = 8, y = 3, z = 6$

(Total 4 marks)

9. (a) Solve the equation $\frac{23 - 2x}{5} = 3$

$$23 - 2x = 15$$

$$23 = 15 + 2x$$

$$8 = 2x$$

Answer $x = 4$

(3)

(b) Solve the inequality $3x + 8 < 29$

$$3x < 29 - 8$$

$$3x < 21$$

$$x < 21 \div 3$$

Answer $x < 7$

(2)
(Total 5 marks)