1 (c) Solve $\frac{5x - 3}{4} = 2x + 3$

Show clear algebraic working.

$x =$ .....

(3)

(Total for Question 1 is 3 marks)

2 (a) Solve $5(4 - x) = 7 - 3x$
Show clear algebraic working.

$x =$ .....

(3)

(Total for Question 2 is 3 marks)

3 (c) Solve $\frac{4x - 2}{3} - \frac{5 - 3x}{4} = 6$

Show clear algebraic working.

$x =$ .....

(4)

(Total for Question 3 is 4 marks)

4 (a) Solve $\frac{4-3x}{5} - \frac{3x-5}{2} = -3$

Show clear algebraic working.

$x =$ .....

(3)

(Total for Question 4 is 3 marks)

5 (b) Solve $(2x + 5)^2 = (2x + 3)(2x - 1)$

$x =$ .....

(3)

(Total for Question 5 is 3 marks)

6 (b) Solve $4 - 3x = \dfrac{5 - 8x}{4}$

Show clear algebraic working.

$x =$ .....

(3)

(Total for Question 6 is 3 marks)

7 (a) Solve $\frac{9a - 7}{5} - \frac{3a - 7}{4} = 4.55$

Show clear algebraic working.

$a =$ .....

(3)

(Total for Question 7 is 3 marks)

8 (a) Solve $p = \dfrac{3p - 5}{10}$

Show clear algebraic working.

$p =$ .....

(3)

(Total for Question 8 is 3 marks)

9 (b) Solve $2x - 3 = \frac{3x - 5}{4}$

Show clear algebraic working.

$x =$ .....

(3)

(Total for Question 9 is 3 marks)

10 Larry is a delivery man.

He has 7 parcels to deliver.
The mean weight of the 7 parcels is 2.7 kg

Larry delivers 3 of the parcels.
Each of these 3 parcels has a weight of W kg

The mean weight of the other 4 parcels is 3.3 kg

Work out the value of W

W = ...

(Total for Question 10 is 3 marks)

11 (a) Solve $\frac{4x + 5}{3} - \frac{3 - 2x}{2} = 13$

Show clear algebraic working.

$x =$ .....

(4)

(Total for Question 11 is 4 marks)

12 (b) Solve $6x - 5 = \frac{4x - 7}{2}$

Show clear algebraic working.

$x =$ .....

(3)

(Total for Question 12 is 3 marks)

13 A particle P moves along a straight line that passes through the fixed point O

The displacement, x metres, of P from O at time t seconds, where $t \geqslant 0$, is given by

$$x = 4t^3 - 27t + 8$$

The direction of motion of P reverses when P is at the point A on the line.

The acceleration of P at the instant when P is at A is $a\,\text{m/s}^2$

Find the value of a

$a =$ .....

(Total for Question 13 is 5 marks)

14 Solve $3(2 - 4x) = 5 - 8x$

Show clear algebraic working.

$x =$ .....

(Total for Question 14 is 3 marks)

15 The diagram shows rectangle *ABCD*

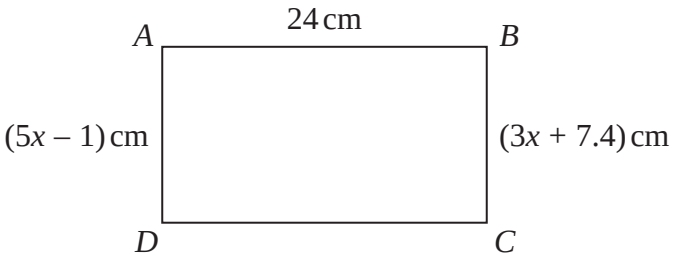

Diagram **NOT** accurately drawn

Work out the perimeter of the rectangle.
Show your working clearly.

..... cm

(Total for Question 15 is 4 marks)

16 Solve $\frac{x+3}{4} - \frac{7-x}{5} = 4.3$

Show clear algebraic working.

$x =$ .....

(Total for Question 16 is 3 marks)

17 *ABCD* is a trapezium.

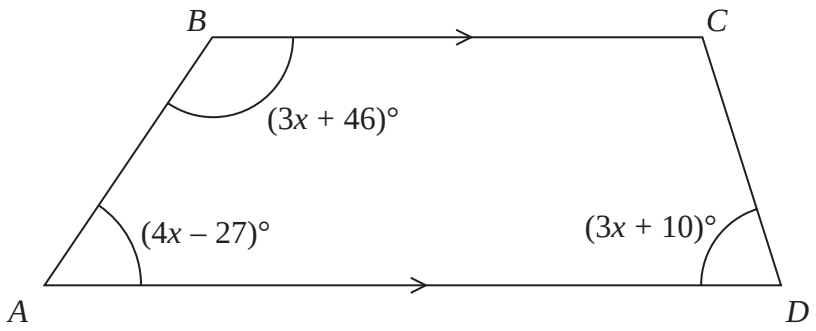

Diagram **NOT** accurately drawn

BC is parallel to *AD*

Find the size of the largest angle inside the trapezium.

..... °

(Total for Question 17 is 4 marks)

18 (c) Solve $\frac{1-2y}{3} = \frac{4}{5} - \frac{2y-1}{2}$

Show clear algebraic working.

$y =$ .....

(3)

(Total for Question 18 is 3 marks)