Topic 4 Algebra 2 (Pre-TT) [39]

1.

Solve the equation $5x - 1 = 3(x + 2)$

(Total 3 marks)

2.

Solve the inequalities:

(a) $4x + 1 > 11$

(b) $3 - 2x \leq 15$

(Total 4 marks)

3.

Make t the subject of the formula $w = 3t + 11$

(Total 2 marks)

4.

Solve the equations

(a) $\frac{17 - x}{3} = 4.5$

(3)

(b) $2(y - 3) = 5 - 3y$

(3)

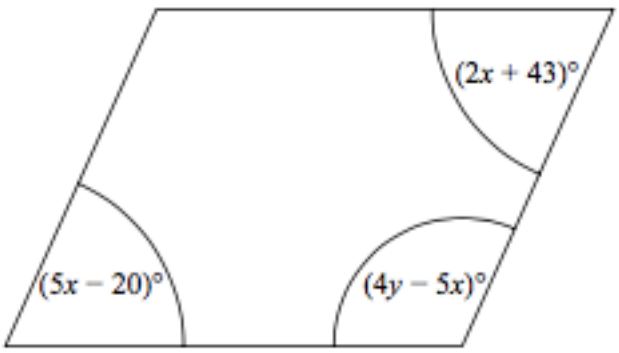
(c) $3(2z - 1) + 4(z + 3) = 5(2z - 1) + 4(3z - 1)$

(3)

(Total 9 marks)

5.

Here is a parallelogram.



Work out the value of x and the value of y.

(Total 5 marks)

6.

Find the smallest integer value of x that satisfies the inequality $5(4x - 3) \geq 60$

(Total 3 marks)

7.

Maya is 6 years younger than Ned.
Peter is 3 times as old as Ned.
The sum of their three ages is 109.

Work out Peter's age.

(Total 4 marks)

8.

Make a the subject of $\quad a + 3 = \dfrac{2a + 7}{r}$

(Total 3 marks)

9.

Solve the equation $\dfrac{23 - 2x}{5} = 3$

(3)
(Total 3 marks)

10.

$$m = \sqrt{\frac{k^3 + 1}{4}}$$

Make k the subject of the formula.

(Total 3 marks)