Year 8

Brackets, Equations & Inequalities

B

White Rose Maths

Name _____

1 Match each statement with the correct expression.

5 multiplied t	$5 + t$
5 less than t	$5 - t$
t less than 5	$t - 5$
t more than 5	$5t$

2 marks

2 Complete the identity.

$3(m + 2) \equiv$ 3 $m +$ 6

1 mark

You may use the bar model to help you.

$m+2$		$m+2$		$m+2$	
m	2	m	2	m	2
m	m		m	2	2

Expand $5(3y + 8)$

15y+40

1 mark

3 Expand and simplify.

$$6(2q - 1) - 4(3 + 2q)$$

9q-18

2 marks

Expand $3f(f - 9)$

3f² - 27f

1 mark

4 Solve $2x - 7 = 23$

x=15

2 marks

5 Factorise $8x + 20$

4(2x + 50)

1 mark

Factorise fully $12c + 9cd$

3c(4+3d)

2 marks

6 Solve the inequality.

$$17 \geq 2x - 5$$

≤ 11

2 marks

7 A coffee costs x pence.
A tea costs 20 pence less than a coffee.

Write an expression, in terms of x, for the cost of a tea.

20 pence

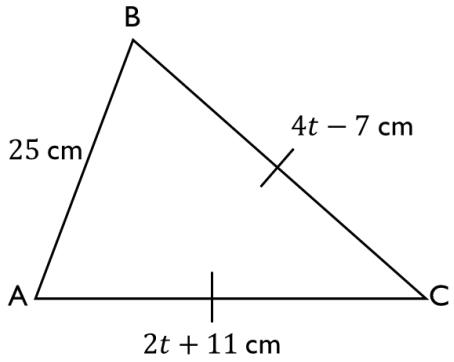
1 mark

Write an expression, in terms of x, for the total cost of 3 coffees and 2 teas.

$5x-40$

1 mark

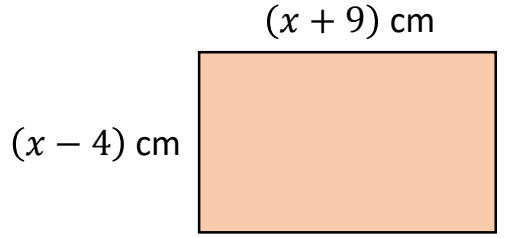
8 H Triangle ABC is an isosceles triangle.
Form and solve an equation to find the value of t.



$t = 9$

2 marks

9 H Find an expression for the area of this rectangle, giving your answer in the form $ax^2 + bx + c$.



$x^2+5x-36$ cm^2

2 marks

Total marks

B