

Year 8

Brackets, Equations & Inequalities



Name _____

1 Match each statement with the correct expression.

6 multiplied by y

$6 - y$

6 more than y

$y - 6$

y less than 6

$y + 6$

6 less than y

$6y$

2 Complete the identity.

$$4(x + 5) \equiv \underline{\quad}x + \underline{\quad}$$

You may use the bar model to help you.

$x + 5$		$x + 5$		$x + 5$		$x + 5$	
x	5	x	5	x	5	x	5
x	x	x	x	5	5	5	5

Expand $3(2x + 7)$

2 marks

1 mark

1 mark

3 Expand and simplify.

$$5(2p - 3) - 2(2 + 3p)$$

2 marks

Expand $2d(d + 3)$

1 mark

4 Solve $3x - 5 = 31$

2 marks

5 Factorise $6x - 9$

1 mark

Factorise fully $6a + 10ab$

2 marks

- 6 Solve the inequality.

$$21 \leq 2x + 3$$

2 marks

- 7 A ruler costs x pence.

A pen costs 10 pence more than the ruler.

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

_____ pence

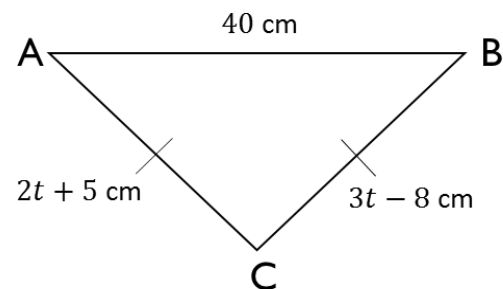
1 mark

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

1 mark

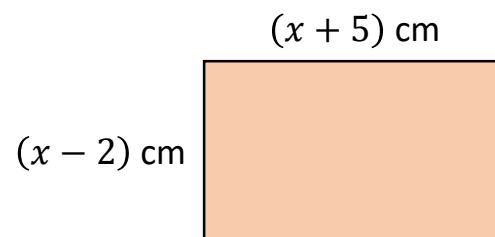
- 8 Triangle ABC is an isosceles triangle.

Form and solve an equation to find the value of t .



2 marks

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



_____ cm^2

2 marks

Total marks