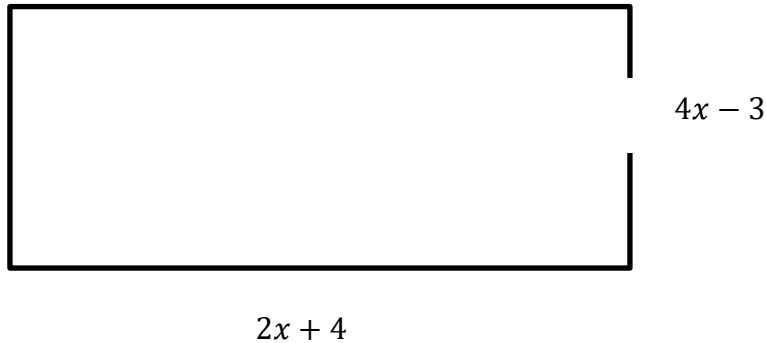


# Algebra: Quadratics, Rearranging Formulae and Identities

## Exam Questions

Answer all questions fully.

- 1 A field is rectangular in shape. The lengths are given in metres.



- 1 (a) Find an expression for the perimeter of the field.

[2 marks]

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Answer \_\_\_\_\_

- 1 (b) Tick the expression, for the area of the field

[2 marks]

$18x - 12$

$(2x + 4)(4x - 3)$

$8x^2 + 10x - 12$

$6x^2 - 14x - 12$

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- 2 A playground is rectangular in shape. An expression is given for the area of the playground in  $m^2$ .

$$\text{Area} = x^2 + 7x - 18$$

- 2 (a) Find an expression for the perimeter of the playground.

**[3 marks]**

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Answer \_\_\_\_\_

- 2 (b) Given  $x = 11$  find the value of the area of the playground in  $m^2$ .

**[2 marks]**

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Answer \_\_\_\_\_

**3 (a)** Make  $x$  the subject of  $4x + 12 = ax + 8y$

**[3 marks]**

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Answer \_\_\_\_\_

**3 (b)** Hence or otherwise, given  $a = 2$  and  $y = 10$ , find the value of  $x$ .

**[2 marks]**

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Answer \_\_\_\_\_