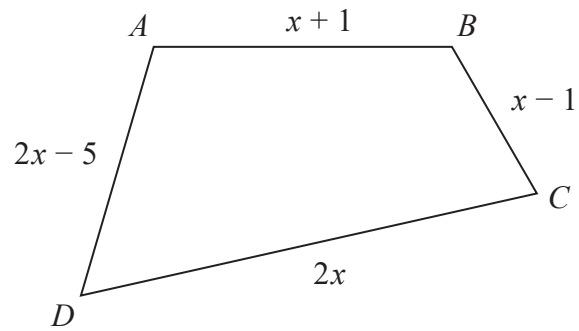


# Forming and Solving Equations

November 2022 Paper 1

16 Here is a quadrilateral  $ABCD$ .



All the measurements are in centimetres.

The perimeter of  $ABCD$  is 52 centimetres.

Work out the length of  $DC$ .

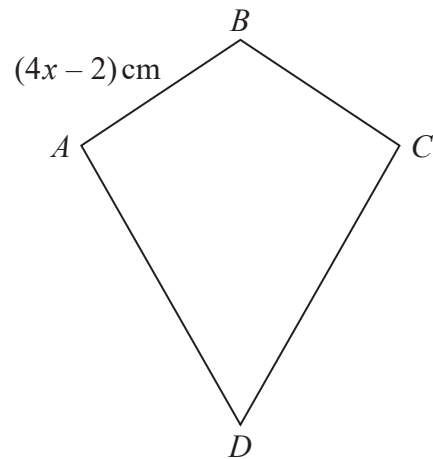
..... centimetres

**(Total for Question 16 is 4 marks)**

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November 2021 Paper 1

16  $ABCD$  is a kite.



$$AB = (4x - 2) \text{ cm}$$

Jasper says that  $x$  could be 0.5

(a) Explain why Jasper cannot be correct.

.....

.....

.....

(1)

$$AD = 3AB$$

The kite has a perimeter of 64 cm.

(b) Find the value of  $x$ .

$$x = \text{.....}$$

(3)

(Total for Question 16 is 4 marks)

## November 2023 Paper 1

**24** Mano has three shelves of books.

There are  $x$  books on shelf **A**.

There are  $(3x + 1)$  books on shelf **B**.

There are  $(2x - 5)$  books on shelf **C**.

There is a total of 44 books on the three shelves.

All the books have the same mass.

The books on shelf **B** have a total mass of 7500 g.

Work out the total mass of the books on shelf **A**.

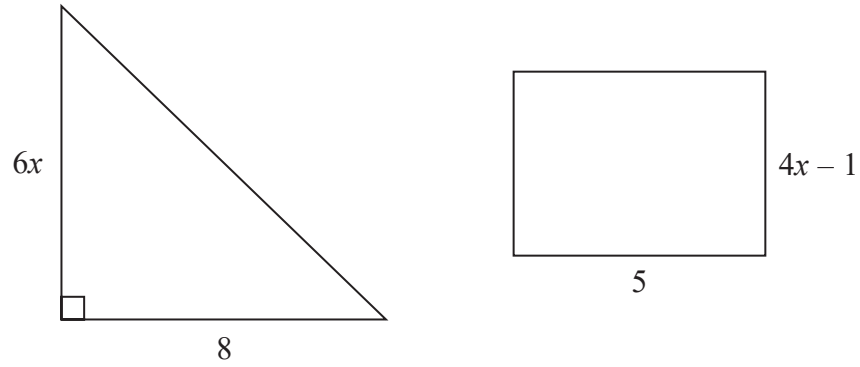
..... g

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**(Total for Question 24 is 5 marks)**

June 2023 Paper 2

24 Here is a triangle and a rectangle.



All measurements are in centimetres.

The area of the triangle is  $10 \text{ cm}^2$  greater than the area of the rectangle.

Work out the value of  $x$ .

$x = \dots\dots\dots$

**(Total for Question 24 is 4 marks)**

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## June 2022 Paper 3

24 Rick, Selma and Tony are playing a game with counters.

Rick has some counters.

Selma has twice as many counters as Rick.

Tony has 6 counters less than Selma.

In total they have 54 counters.

the number of counters Rick has : the number of counters Tony has =  $1 : p$

Work out the value of  $p$ .

$p = \dots\dots\dots$

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**(Total for Question 24 is 5 marks)**

## November 2021 Paper 3

25 The first four terms of a Fibonacci sequence are

$$a \quad 2a \quad 3a \quad 5a$$

The sum of the first five terms of this sequence is 228

Work out the value of  $a$ .

.....  
**(Total for Question 25 is 3 marks)**

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