Intermediate Maths June 2017 P1 Q5

Team A and Team B play in a competition.

Team A has nine more points than Team B.
Team A has four times as many points as Team B.

How many points does each team have? [2]

Intermediate Maths June 2017 P1 Q9

In this question, you will be assessed on the quality of your organisation, communication and accuracy in writing.

In the diagram below,
- *ABCD* is a rectangle, and
- *PQ* is parallel to *AD*.

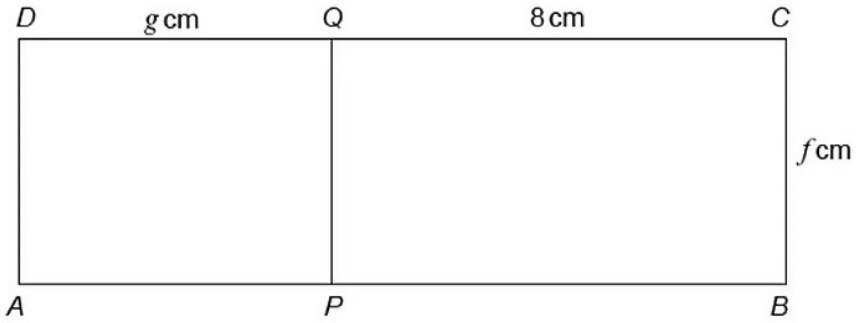


Diagram not drawn to scale

The area of *ABCD* is 52 cm^2.
The area of *APQD* is 20 cm^2.

Calculate the values of f and g.
You must show all your working. [5 + 2 OCW]

Intermediate Maths Summer 2019 P2 Q15

The Morgan family and the Smith family are on holiday in Aberystwyth.
There are 7 adults and 2 children in the Morgan family.
There are 4 adults and 3 children in the Smith family.

Both families visit a Craft Centre.
The entry price to the Craft Centre is £x for adults and £y for children.

The total cost for the Morgan family is £41.50.
The total cost for the Smith family is £29.75.

Form two equations in terms of x and y.

Solve your equations, using an algebraic method, to find the entry price for adults and the entry price for children. [5]

Intermediate Maths Sample 1 P2 Q15

An allotment has two rectangular flower beds A and B.

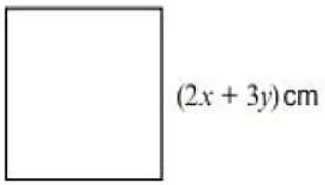
Flower bed A is x metres long and y metres wide.
Flower bed B is twice as long as flower bed A and is 3 metres wider than flower bed A.

The perimeter of flower bed A is 18 metres.
The perimeter of flower bed B is 34 metres.

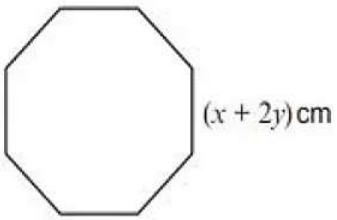
Use an algebraic method to calculate the area of flower bed B.
You must show all your working. [6]

Intermediate Maths Nov 2016 P1 Q15

Each side of a square is of length $(2x + 3y)$ cm.
The perimeter of the square is 62 cm.



Each side of a regular octagon is of length $(x + 2y)$ cm.
The perimeter of the octagon is 72 cm.



Use an algebraic method to find the value of x and the value of y. [5]

Intermediate Maths Nov 2017 P1 Q16

Solve the following simultaneous equations using an algebraic (not graphical) method. [4]

$$4x - 3y = 2$$
$$6x - 5y = 1$$

Intermediate Maths June 2017 P1 Q17

Solve the following simultaneous equations using an algebraic (not graphical) method. [4]

$$3x + 4y = 7$$
$$2x - 3y = 16$$

Intermediate Maths Summer 2018 P2_Q18

A rectangle of length 12 cm and width $(2x - y)$ cm has an area of 72 cm^2.

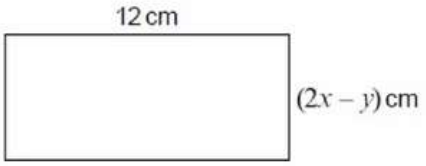


Diagram not drawn to scale

KLMN is a kite where $KL = 3x$ cm and $LM = y$ cm.

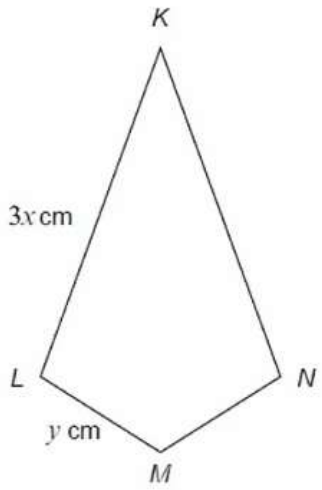


Diagram not drawn to scale

The perimeter of the kite *KLMN* = 33 cm.

Calculate the values of x and y.

You must show all your working.
Do not use a trial and improvement method. [5]