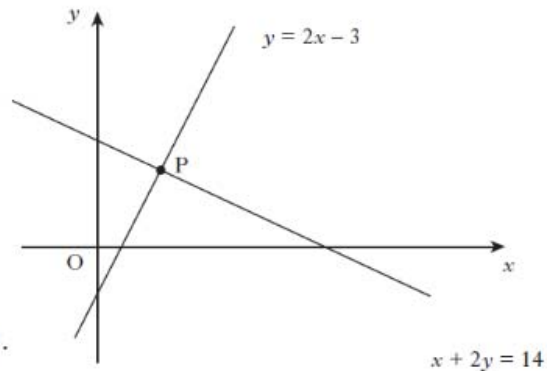


Credit Revision - Simultaneous Equations

2012 Paper 1

8. The graph below shows two straight lines.

- $y = 2x - 3$
- $x + 2y = 14$



The lines intersect at the point P.

Find, **algebraically**, the coordinates of P.

4KU

2011 Paper 1

7. (a) Brian, Molly and their four children visit Waterworld.

The total cost of their tickets is £56.



Let a pounds be the cost of an adult's ticket and c pounds the cost of a child's ticket.

Write down an equation in terms of a and c to illustrate this information.

1KU

(b) Sarah and her three children visit Waterworld.

The total cost of their tickets is £36.

Write down another equation in terms of a and c to illustrate this information.

1KU

(c) (i) Calculate the cost of a child's ticket.

2RE

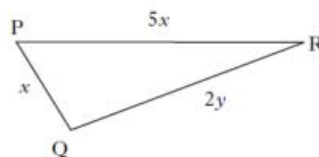
(ii) Calculate the cost of an adult's ticket.

1RE

2009 Paper 1

8. In triangle PQR:

- $PQ = x$ centimetres
- $PR = 5x$ centimetres
- $QR = 2y$ centimetres.



(a) The perimeter of the triangle is 42 centimetres.

Write down an equation in x and y to illustrate this information.

2 KU

(b) PR is 2 centimetres longer than QR.

2RE

Write down another equation in x and y to illustrate this information.

(c) Hence calculate the values of x and y .

3RE

2008 Paper 2

4. Aaron saves 50 pence and 20 pence coins in his piggy bank.

Let x be the number of 50 pence coins in his bank.

Let y be the number of 20 pence coins in his bank.



- (a) There are 60 coins in his bank. 1KU
Write down an equation in x and y to illustrate this information.
- (b) The total value of the coins is £17.40. 1KU
Write down another equation in x and y to illustrate this information.
- (c) Hence find **algebraically** the number of 50 pence coins Aaron has in his piggy bank. 3RE

2007 Paper 1

11. (a) A cinema has 300 seats which are either standard or deluxe. 1KU
Let x be the number of standard seats and y be the number of deluxe seats.
Write down an algebraic expression to illustrate this information.
- (b) A standard seat costs £4 and a deluxe seat costs £6. 2KU
When all the seats are sold the ticket sales are £1380.
Write down an algebraic expression to illustrate this information. 3RE
- (c) How many standard seats and how many deluxe seats are in the cinema?

2006 Paper 1

9. Euan plays in a snooker tournament which consists of 20 games.
He wins x games and loses y games.
- (a) Write down an equation in x and y to illustrate this information. 1KU
- (b) He is paid £5 for each game he wins and £2 for each game he loses.
He is paid a **total** of £79.
Write down another equation in x and y to illustrate this information. 2KU
- (c) How many games did Euan **win**? 3RE