

National 5 Mathematics
Exam Questions by Topic

Simultaneous Equations

2015 N5 Past Paper P1, Q11

1. Solve algebraically the system of equations

$$3x + 2y = 17$$

$$2x + 5y = 4$$

(3 marks)

2014 N5 Past Paper P2, Q3

2. Two groups of people go to a theatre.

Bill buys tickets for 5 adults and 3 children.

The total cost of his tickets is £158.25.

(a) Write down an equation to illustrate this information (1 mark)

(b) Ben buys tickets for 3 adults and 2 children.

The total cost of his tickets is £98.

Write down an equation to illustrate this information. (1 mark)

(c) Calculate the cost of a ticket for an adult and the cost of a ticket for a child. (4 marks)

2013 Specimen P1, Q10

3. Brian and Bob visit a ski resort. Brian buys 3 full time passes and 4 restricted passes. The total cost of his passes is £185.

(a) Write down an equation to illustrate this information. (1 mark)

(b) Bob buys 2 full passes and 3 restricted passes.

The total cost of his passes is £130.

Write down an equation to illustrate this information. (1 mark)

(c) Find the cost of a restricted pass and the cost of a full pass. (3 marks)

Practice Paper A, P1, Q8

4. Find the point of intersection of the straight lines with equations

$2x + y = 5$ and $x - 3y = 6$ (4 marks)

Practice Paper F, P2, Q4

5. Solve algebraically the system of equations

$$4x + 2y = 13$$

$$5x + 3y = 17$$

(3 marks)