



**Maths**  
**Junior Certificate**  
**Ordinary Level**

**Past Exam Questions on**  
**Simultaneous Equations**



**Q4 Part (c) 2010 Paper 1**

- (c) (i) Eoin is  $t$  years of age.  
Katie is 4 years older than Eoin.  
Laura is twice as old as Eoin.

Write Katie's age and Laura's age in terms of  $t$ .


Katie's age =

Laura's age =

- (ii) From part (i), the sum of Eoin's age, Katie's age and Laura's age is 52.

Write down an equation in  $t$  to represent this information.

Solve your equation to find Eoin's age in years.

 Equation:

Eoin's age =

- (iii) Solve for  $x$  and  $y$ :

$$7x + 2y = 11$$

$$4x + y = 7$$



$x =$

$y =$



**Q5 Part (c) 2008 Paper 1**

(iii) Solve for  $x$  and for  $y$ :

$$3x + 2y = 73$$

$$4x + y = 59$$



$x =$

$y =$

**Q4 Part (c) 2007 Paper 1**

(ii) Solve for  $x$  and for  $y$ :

$$3x + 5y = 13$$

$$x + 2y = 5$$



$x =$   $y =$

**Q4 Part (c) 2006 Paper 1**

- 4(c) The cost of 2 jumpers and 3 shirts is €84.  
The cost of 4 jumpers and 1 shirt is €78.  
Let € $x$  be the cost of a jumper and let € $y$  be the cost of a shirt.



- (i) Write down two equations, each in  $x$  and  $y$ , to represent the above information.



First equation:

Second equation:

- (ii) Solve these equations to find the cost of a jumper and the cost of a shirt.



Cost of a jumper =

Cost of a shirt =

- (iii) Verify your result.



**Q5 Part (c) 2005 Paper 1**

(iii) Solve for  $x$  and for  $y$ :

$$3x - y = 8$$

$$x + 2y = 5$$



$x =$   $y =$