

# M7 = 16 days to go!

16 Jill buys the tea and coffee for everyone in the office at break time.

On Monday she bought 3 teas and 5 coffees.  
The bill on Monday was £10.50

On Tuesday she bought 4 teas and 4 coffees.  
The bill on Tuesday was £10

On Wednesday she bought 2 teas and 6 coffees.

What was the total bill on Wednesday?

**A solution by trial and improvement will not be accepted.**

Answer £ \_\_\_\_\_ [6]

6 Make  $n$  the subject of the formula

$$y + 8 = n - 4$$

Answer  $n =$  \_\_\_\_\_ [2]

11 Over a period of 8 hours, the temperature of a room follows the relationship

$$T = h^2 - 6h + 15$$

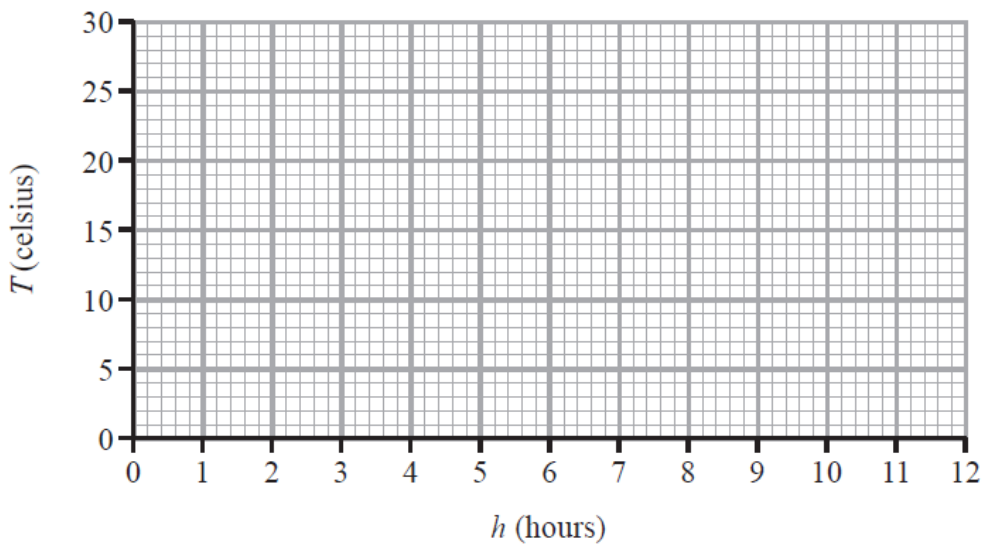
$T$  is the temperature in degrees Celsius,  $h$  hours after the experiment started.

(a) Complete the table below:

$h$	0	1	2	3	4	5	6	7	8
$T$	15	10		6	7		15	22	31

[1]

(b) Plot your points on the graph below:



[2]

(c) Use your graph to find the times when the temperature in the room was 12 degrees Celsius.

Answer \_\_\_\_\_ [1]