

M8 = 8 days to go!

8 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]

Expand and simplify $(\sqrt{3} + \sqrt{5})^2$

.....
(2)

14 A line has equation $y = 2x + 3$

A curve has equation $y^2 = 8x + 33$

The line and the curve meet at the points A and B.

Calculate the length of AB, leaving your answer in the form $p\sqrt{q}$ where p and q are integers.

Answer _____ [7]