Finding a Turning Point by Completing the Square

SCAN ME

REVISE THIS TOPIC

CHECK YOUR ANSWERS

SCAN ME

1 Find the coordinates of the turning point on the curve with equation $y = x^2 + 2x + 7$
You must show all your working.

(..... , ...)

(Total for Question 1 is 3 marks)

2 Find the coordinates of the turning point on the curve with equation $y = x^2 + 6x + 13$
You must show all your working.

(..... , ...)

(Total for Question 2 is 3 marks)

3 Find the coordinates of the turning point on the curve with equation $y = x^2 – 10x + 29$
You must show all your working.

(..... , ...)

(Total for Question 3 is 3 marks)

4 Find the coordinates of the turning point on the curve with equation $y = x^2 - 2x - 7$
You must show all your working.

(..... , ...)
(Total for Question 4 is 3 marks)

5 Find the coordinates of the turning point on the curve with equation $y = x^2 + 12x + 40$
You must show all your working.

(..... , ...)
(Total for Question 5 is 3 marks)

6 Find the coordinates of the turning point on the curve with equation $y = x^2 - 3x + 4$
You must show all your working.

(..... , ...)
(Total for Question 6 is 3 marks)

7 Find the coordinates of the turning point on the curve with equation $y = x^2 - 5x - 9$
You must show all your working.

(..... , ...)
(Total for Question 7 is 3 marks)

8 A curve with equation $y = x^2 + bx + c$ has a turning point at the point (4, -2)
Work out the value of b and c.

$a =$ .....

$b =$ .....

(Total for Question 8 is 3 marks)

9 A curve with equation $y = x^2 + bx + c$ has a turning point at the point (-4, 9)
Work out the value of b and c.

$a =$ .....

$b =$ .....

(Total for Question 9 is 3 marks)

10 A curve with equation $y = x^2 + bx + c$ has a turning point at the point (-3, -3)
Work out the value of b and c.

$a =$ .....

$b =$ .....

(Total for Question 10 is 3 marks)

11 Find the coordinates of the turning point on the curve with equation $y = 2x^2 - 8x + 33$
You must show all your working.

(..... , ...)

(Total for Question 11 is 4 marks)

12 Find the coordinates of the turning point on the curve with equation $y = 3x^2 + 18x - 4$
You must show all your working.

(..... , ...)

(Total for Question 12 is 4 marks)

13 Find the coordinates of the turning point on the curve with equation $y = 5x^2 - 15x + 3$
You must show all your working.

(..... , ...)

(Total for Question 13 is 5 marks)