

# Finding Stationary Points Worksheet 1

Answer each of the following without using a calculator and using the boxes provided for your answers. Show all of your working.

Click on the link in the Header of this page, or scan the QR Code to view the online notes and tutorial(s) for this worksheet.

#### Exercise 1

Using the derivative function, find the coordinates of any stationary point(s) along the length of the curve defined by:

$$y = x^2 - 2x - 8$$

#### Exercise 2

Using the derivative function, find the coordinates of any stationary point(s) along the length of the curve defined by:

$$y = -x^2 - 6x - 8$$



## Exercise 3

Using the derivative function, find the coordinates of any stationary point(s) along the length of the curve defined by:

$$y = 2x^3 - 12x^2 - 30x - 10$$





### Exercise 4

Using the derivative function, find the coordinates of any stationary point(s) along the length of the curve defined by:

 $y = -2x^3 + 3x^2 + 36x - 6$ 





## Exercise 5

Using the derivative function, find the coordinates of any stationary point(s) along the length of the curve defined by:

$$y = x^3 + 3x^2 + 3x - 2$$

