

Activity 3

1. A curve C has equation $y = 2x^2(x - 5)$

(a) Find, using calculus, the x coordinates of the stationary points of C . (4)

(b) Hence find the values of x for which y is increasing. (2)

One way to do part (a) requires the following steps:

- A Expand the brackets
- B Differentiate the expanded form
- C Set the derivative = 0 to get an algebraic equation
- D Solve the algebraic equation.

There are four processes for 3 marks.

Which two processes should be combined to get a single mark?