

Activity 7

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 4 processes for 3 marks.

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

1. A and B	1. Yes 2. No
2. B and C	1. Yes 2. No
3. C and D	1. Yes 2. No
4. Some other combination	