$y = \frac{x^2-3}{x-2}$ $Max\ and\ Min$

One (1) of the extreme points is x = 1

The function is $y = \frac{x^2-a}{x-2}$ $x \neq 2$

Find a = ?

$y' = \frac{2x(x-2)-(x^2-a)}{(x-2)^2} = \frac{x^2-4x+a}{(x-2)^2} = 0$

$y'(x=1) = 0 \Rightarrow 1 - 4.1 + a = -3 + a = 0$, $a = 3$

$y = \frac{x^2-3}{x-2} \Rightarrow y' = \frac{2x(x-2)-(x^2-3)}{(x-2)^2}$, a = 3

$y' = 0$, $x^2 - 4x + 3 = 0$, $(x-3)(x-1) = 0$

$x = 3$, $x = 1$

(3,6) (1,2)

x	x = 1	x = 3
y'	+++++++0--------	----------0++++++++