

$$f(x) = x^3 - 9x^2 + 15x - 135 \stackrel{\text{SET}}{=} 0 \Rightarrow x^2(x-9) + 15(x-9) \\ = \underline{(x-9)(x^2+15)} = 0 \Rightarrow x=9$$

$$f'(x) = 3x^2 - 18x + 15 \stackrel{\text{SET}}{=} 0 \Rightarrow 3(x^2 - 6x + 5) = 3(x-5)(x-1) = 0 \\ \Rightarrow x \in \{1, 5\} \text{ C.P.}$$

$$f''(x) = 6x - 18 \stackrel{\text{SET}}{=} 0 \Rightarrow x=3 \text{ I.P.}$$

