NAME: S.No.   ID:

Maximum Marks: 8   Section: Time Allowed: 25 minutes

(1) Evaluate $\lim_{x \to 2} \frac{\sqrt{(6-x)} - 2}{\sqrt{(3-x)} - 1}$.

(2) Use the ϵ, δ definition of limit to show that $\lim_{x \to 2} \frac{3x^2 - 10x + 8}{x - 2} = 2$.

(3) Sketch the graph of $f(x) = x - [x],\quad -3 \le x < 3$.