

Q1.  $\int \frac{1}{\sqrt{4x^2 + 4x - 3}} dx$

Final Ans.

Q2. Evaluate the improper integral,  $\int_0^{\infty} \frac{1}{\sqrt{x}(1+x)} dx$ , if it is convergent or show that it is divergent. **(Hint: Evaluate the indefinite integral first)**

Final Ans.