

Q1. Let $y = \pi x^2$. If maximum error in the measurement of x is 0.1 when x is 10, using differentials estimate the percentage error in the measurement y .

Q3. Find the absolute maximum and absolute minimum values of

$$f(x) = x^{1/3}(x-1); -1 \leq x \leq 1$$

Q2. Find $d(\tanh^{-1} \sqrt{1+x^2}) / dx$.