

Do It Properly and Correctly and Neatly

1. English: Determine the maximum value of the function and Minimum $f(x) = \frac{2+x^2}{1+2x}$

2. Given the function $f(x) = x^4 - 4x^3 + 4x^2 + 1$

specify:

a. The critical point or stationary point

b. Interval where $f(x)$ the interval where $f(x)$ the UP and DOWN

c. Draw a sketch graph

3. Mr. Farmer had a plan to raise ducks, according to rule 1 m² cages must be occupied 50 ducks, Mr. Farmer has a wire that can be made of duck cage 30 meters in length, behind the Farmer's house there are walls, cages of ducks that will be made from squares, one side of the cage is a third side wall and the other is a wire, you as a student who had studied Calculus Udinus, try to give solution cage size should be made in order to load the pack Farmer duck as much as possible and how many ducks to be purchased pack Farmers

4. Determine The Integral :

a. $\int \frac{x+4}{x^3 - 2x^2 - x + 2} dx =$

b. $\int_0^1 (4x+8)(x^2 + 4x)^3 dx =$

5. Determine the area of the region bounded by the function:

$$f(x) = \begin{cases} 1-x^2 & : 0 \leq x \leq 2 \\ -3 & : 2 \leq x \leq 3 \\ 6-x & : 3 \leq x \leq 7 \end{cases}$$

6. Determine the volume of round objects that are restricted function $f(x) = 2 - 2x$ in the interval $[-2, 0]$ revolved about the x-axis as far as 360°.

GOOD LUCK