Please submit your Homework 5 assignment as a Word or PDF attachment.

Homework 5 (all problems are in the textbook):

p. 229 # 1, 2

p. 236 # 1, 5, 8, 10, 12

p. 251 # 11, 13, 16, 18, 21, 23, 26, 28

p. 263 # 1, 8, 18, 25, 50

***page 229 # 1, 2***

complete two iterations of newtons method to approximate a zero of the function using the given initial guess.

2)

***page 236 # 1, 5, 8, 10, 12***

find the tangent line approximation T to the graph F at the given point use this linear approximation to complete the table.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| x | 1.9 | 1.99 | 2 | 2.01 | 2.1 |
| f(x) |  |  |  |  |  |
| T(x) |  |  |  |  |  |

1)

5)

Use the information to evaluate and compare

8) function value x= -2 differential of x

10) function value x= 2 differential

Find the differential dy of the given function

12)

***page 251 # 11, 13, 16, 18, 21, 23, 26, 28***

find the indefinite integral and check the result by differentiation

11)

13)

16)

18)

21)

23)

26)

28)

***page 263 # 1, 8, 18, 25, 50***

use the summation capabilities of a graphing utility to verify your result

1)

Use sigma notation to write the sum

8)

Use the properties of summation and theorem to evaluate the sum. Use the summation capabilities graphing of a graphing utility to verify your result.

18)

Use left and right endpoints and the given number of rectangles to find two approximations of the area of the region between the graph of the function ans the x-axis over the given interval

25) , 4 rectangles

Use the limit prosses to find the area of the region bounded by the graph of the function and the x-axis over the given interval sketch the region

50)