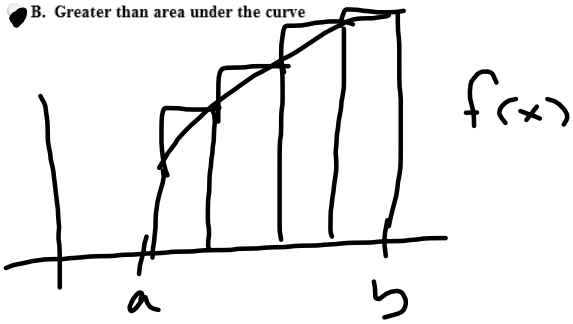
1. value: 4.00 points

Sec. Ex. 19c - 4.3 Section Exercise 19c

1 out of 1 attempt

Graphically determine whether a Riemann sum with right−endpoint evaluation points will be greater than or less than the area under the curve $y = f(x)$ on $[a, b]$.
$f(x)$ is increasing and concave down on $[a, b]$.

A. Less than area under the curve
B. Greater than area under the curve



NetCalculator
Assistance
Check My Work
View Hint
View Question
Show Me
Guided Solution
Practice This Question
Print
Questio Print
Report a Problem

references

6:38 PM 8/26/2014

•

http://ezto.mheducation.com/hm.tpx?_=0.9 McGraw-Hill Co... Richard Porter's ... McGraw-Hill Co... Review of Int...
Convert Select Google Search More Rick Po

Review of Integrals instructions | help

prev Question #1 (of 25) next save & exit submit assignment

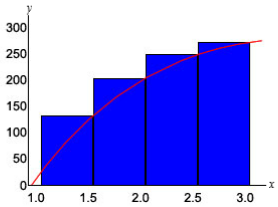
1. value: 4.00 points

Sec. Ex. 19c - 4.3 Section Exercise 19c

Show Me

Graphically determine whether a Riemann sum with right−endpoint evaluation points will be greater than or less than the area under the curve $y = f(x)$ on $[a, b]$.
$f(x)$ is increasing and concave down on $[a, b]$.

Sketch the curve and rectangles with right−endpoint evaluation points.

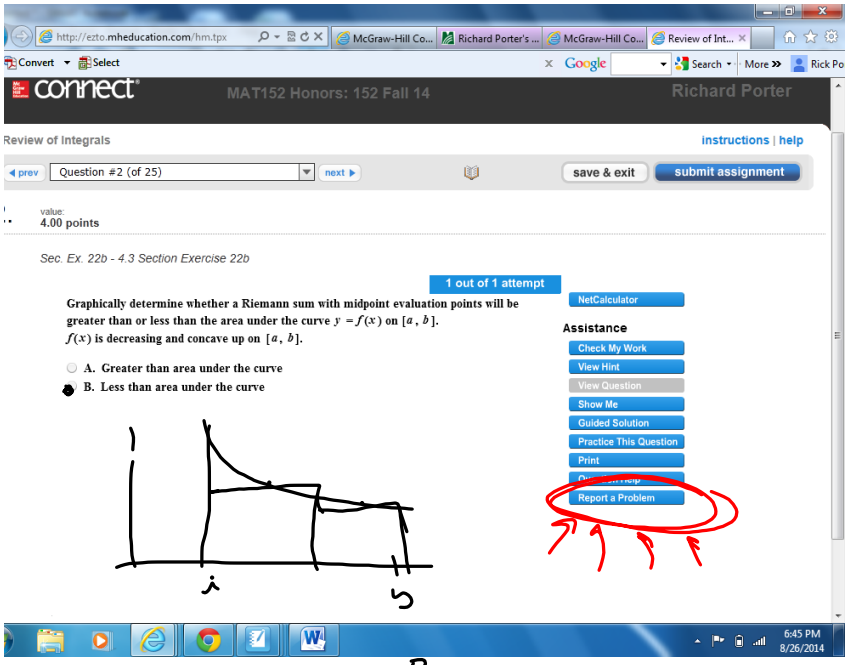


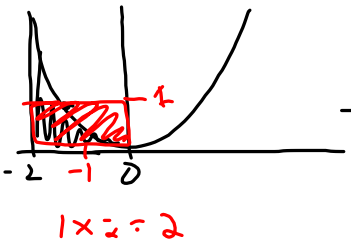
From the graph we see that the right−endpoint evaluation points Riemann sum is greater than the area under the curve.

NetCalculator
Assistance
Try Another
View Hint
View Question
Show Me
Guided Solution
Practice This Question
Print
Question Help
Report a Problem

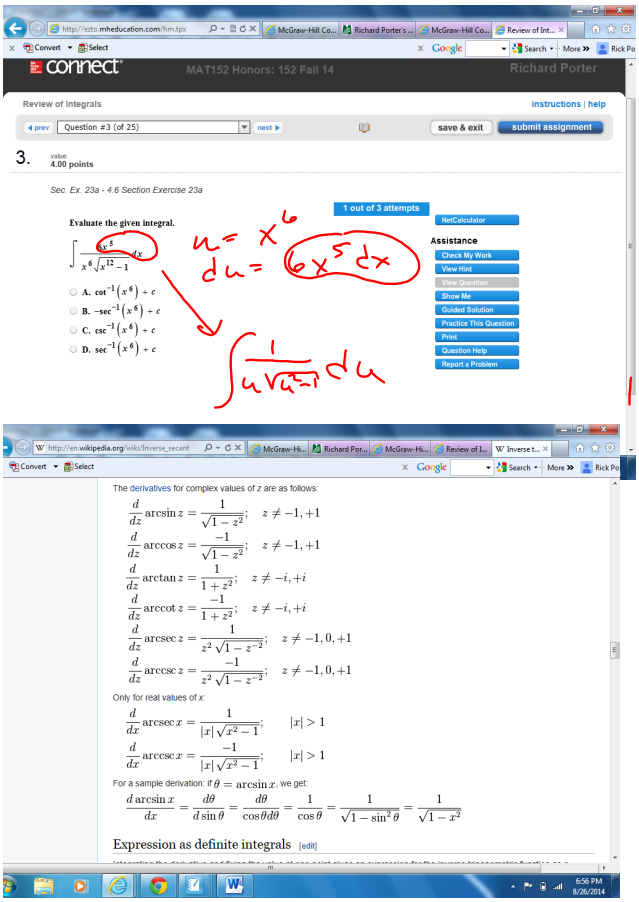
references

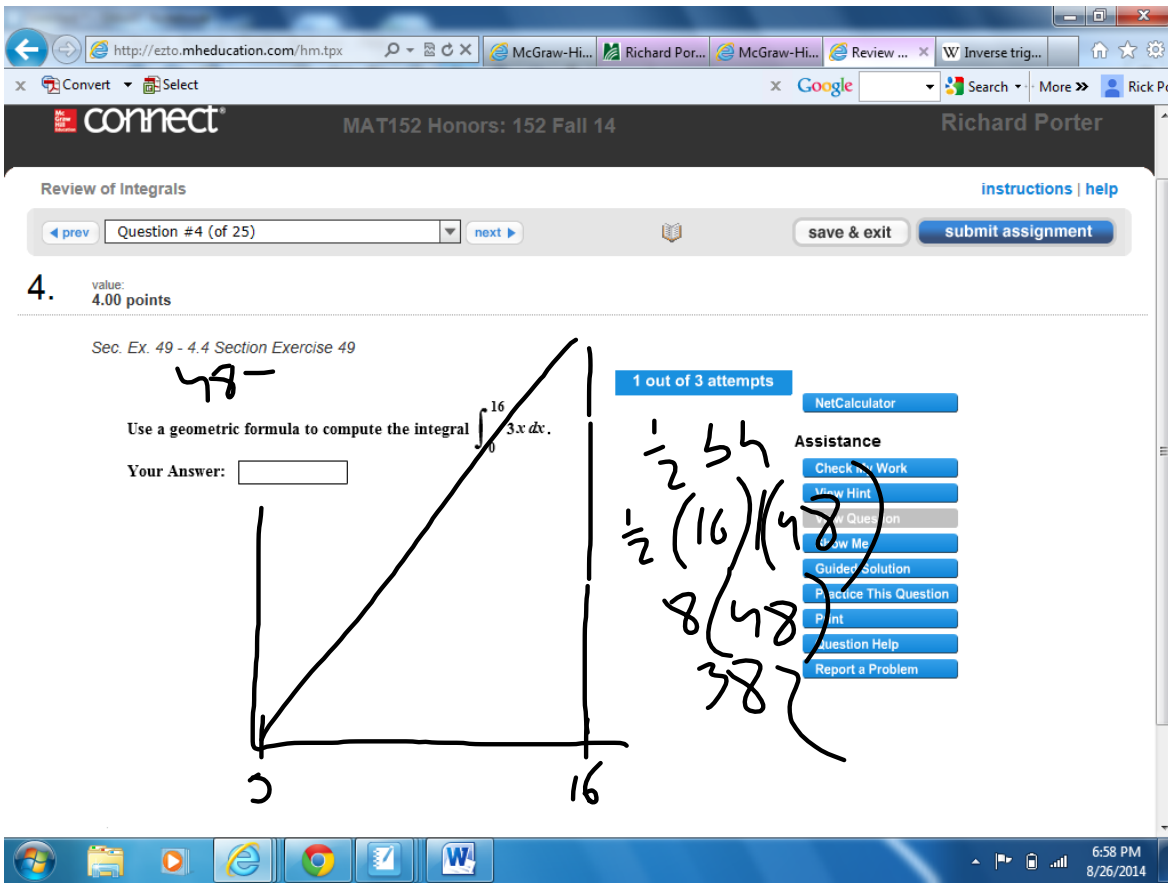
6:43 PM 8/26/2014

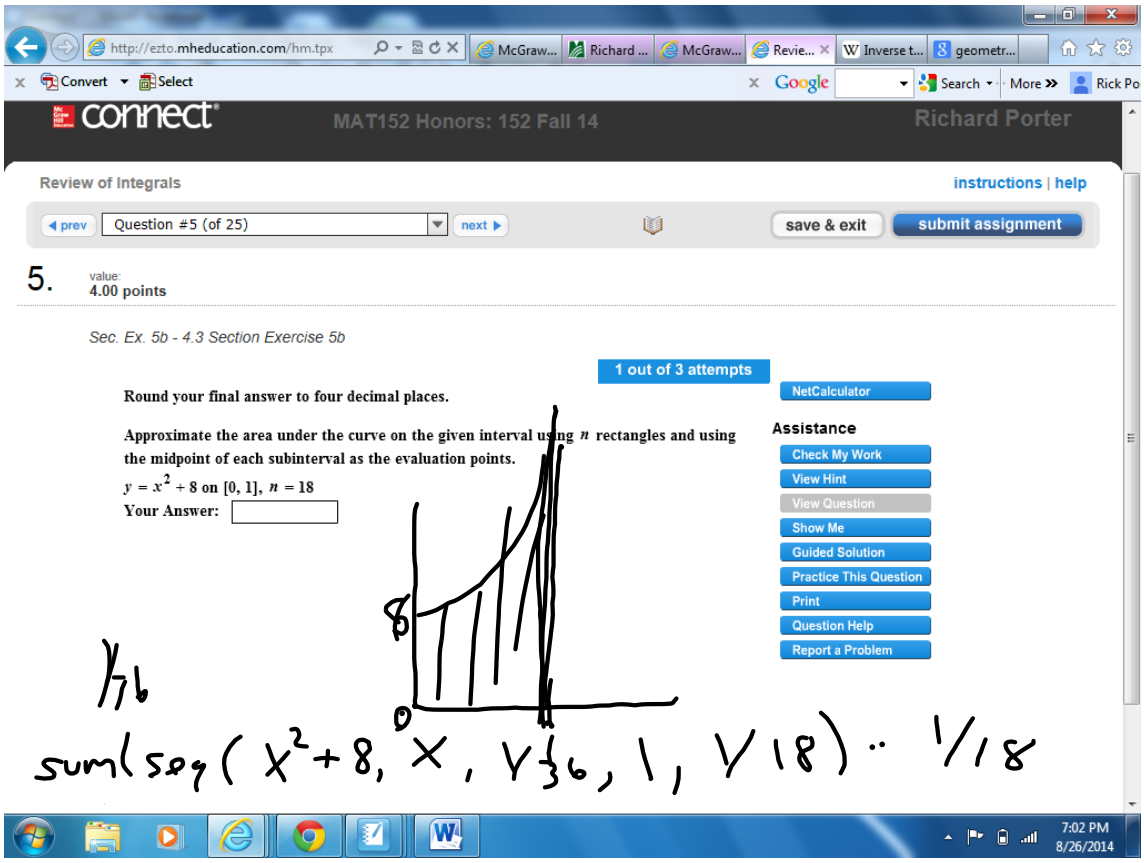




$$\int_{-2}^{0} x^2\,dx = \frac{x^3}{3}\Big|_{-2}^{0} = 0 - \frac{8}{3} = \frac{8}{3}$$




http://ezto.mheducation.com/hm.tpx
connect
MAT152 Honors: 152 Fall 14
Richard Porter
Review of Integrals
instructions | help
prev
Question #4 (of 25)
next
save & exit
submit assignment
4.
value:
4.00 points
Sec. Ex. 49 - 4.4 Section Exercise 49
48 −
Use a geometric formula to compute the integral $\int_0^{16} 3x\,dx$.
Your Answer:
1 out of 3 attempts
NetCalculator
Assistance
Check My Work
View Hint
View Question
Show Me
Guided Solution
Practice This Question
Print
Question Help
Report a Problem
½ 3h
½ (16)(48)
8(48)
384
0
16
6:58 PM
8/26/2014


http://ezto.mheducation.com/hm.tpx
connect
MAT152 Honors: 152 Fall 14
Richard Porter
Review of Integrals
instructions | help
prev
Question #5 (of 25)
next
save & exit
submit assignment
5.
value:
4.00 points
Sec. Ex. 5b - 4.3 Section Exercise 5b
Round your final answer to four decimal places.
Approximate the area under the curve on the given interval using n rectangles and using the midpoint of each subinterval as the evaluation points.
$y = x^2 + 8$ on [0, 1], $n = 18$
Your Answer:
1 out of 3 attempts
NetCalculator
Assistance
Check My Work
View Hint
View Question
Show Me
Guided Solution
Practice This Question
Print
Question Help
Report a Problem
8
0
1/36
sum(seq(x²+8, x, 1/36, 1, 1/18)) .. 1/18
7:02 PM
8/26/2014

6. value: 4.00 points

Example 6 - 4.5 Example 6

1 out of 3 attempts

Evaluate $\int_3^x 16t^3\,dt$.

$$\frac{16t^4}{4}\Big|_3^x$$

$$4x^4 - 4(3)^4$$

$$4x^4 - 324$$

NetCalculator

Assistance

Check My Work
View Hint
View Question
Show Me
Guided Solution
Practice This Question
Print
Question Help
Report a Problem

7:11 PM 8/26/2014

http://ezto.mheducation.com/hm.tpx

connect MAT152 Honors: 152 Fall 14 Richard Porter

Review of Integrals

instructions | help

prev Question #7 (of 25) next

save & exit submit assignment

7. value: 4.00 points

Sec. Ex. 3a - 4.2 Section Exercise 3a

1 out of 3 attempts

Compute the sum.

The sum of the squares of the first 59 positive integers.

Your Answer:

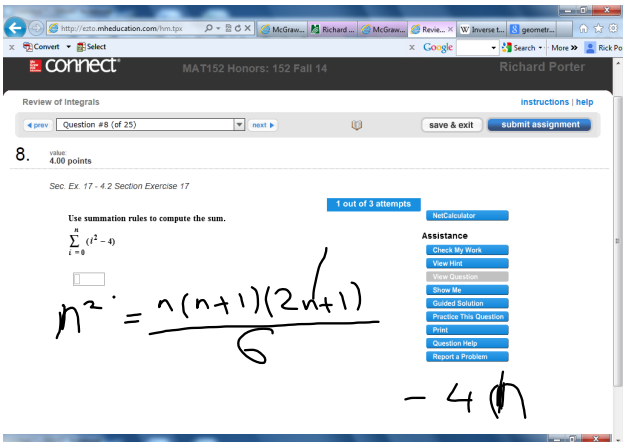
$$\sum_{n=1}^{59} n^2 = \frac{n\times(n+1)\times(2n+1)}{6} = \frac{(59)(60)(119)}{6} = 70210$$

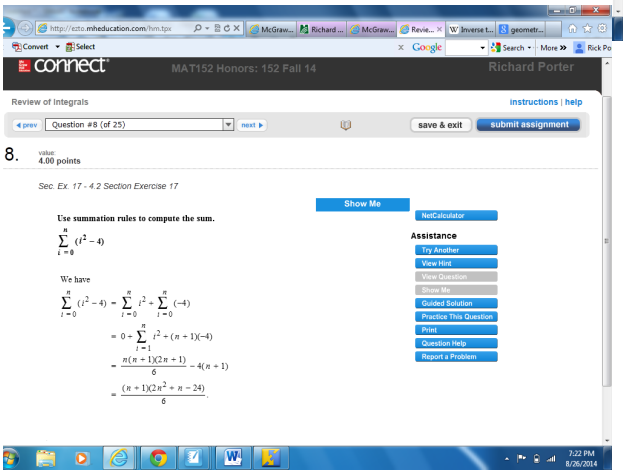
NetCalculator

Assistance

Check My Work
View Hint
View Question
Show Me
Guided Solution
Practice This Question
Print
Question Help
Report a Problem

7:16 PM 8/26/2014


connect
MAT152 Honors: 152 Fall 14
Richard Porter
Review of Integrals
instructions | help
prev
Question #8 (of 25)
next
save & exit
submit assignment
8.
value:
4.00 points
Sec. Ex. 17 - 4.2 Section Exercise 17
1 out of 3 attempts
Use summation rules to compute the sum.
$\sum_{i=0}^{n} (i^2 - 4)$
NetCalculator
Assistance
Check My Work
View Hint
View Question
Show Me
Guided Solution
Practice This Question
Print
Question Help
Report a Problem
$n^2 = \frac{n(n+1)(2n+1)}{6}$
$-4n$


connect
MAT152 Honors: 152 Fall 14
Richard Porter
Review of Integrals
instructions | help
prev
Question #8 (of 25)
next
save & exit
submit assignment
8.
value:
4.00 points
Sec. Ex. 17 - 4.2 Section Exercise 17
Show Me
Use summation rules to compute the sum.
$\sum_{i=0}^{n} (i^2 - 4)$
NetCalculator
Assistance
Try Another
View Hint
View Question
Show Me
Guided Solution
Practice This Question
Print
Question Help
Report a Problem
We have
$\sum_{i=0}^{n} (i^2 - 4) = \sum_{i=0}^{n} i^2 + \sum_{i=0}^{n} (-4)$
$= 0 + \sum_{i=1}^{n} i^2 + (n+1)(-4)$
$= \frac{n(n+1)(2n+1)}{6} - 4(n+1)$
$= \frac{(n+1)(2n^2+n-24)}{6}$