

## Assignment Homework\_1 due 04/10/2018 at 10:00pm PDT

1. (1 pt)

Find the most general antiderivative of  $f(x) = -6x^2 - 3x + 9$ .

Note: Any arbitrary constants used must be an upper-case "C".

$$F(x) = \underline{\hspace{2cm}}$$

i!-

Answer(s) submitted:

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(incorrect)

2. (1 pt)

Find the most general antiderivative of  $f(x) = 1x^{1/4} - 9x^{3/4}$ .

Note: Any arbitrary constants used must be an upper-case "C".

$$F(x) = \underline{\hspace{2cm}}$$

i!-

Answer(s) submitted:

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(incorrect)

3. (1 pt)

Find the most general antiderivative of  $f(u) = \frac{-6u^4 + 4\sqrt{u}}{u^2}$ .

Note: Any arbitrary constants used must be an upper-case "C".

$$F(u) = \underline{\hspace{2cm}}$$

i!-

Answer(s) submitted:

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(incorrect)

5. (1 pt)

(a) Estimate the area under the graph of  $f(x) = 9/x$  from  $x = 1$  to  $x = 5$  using four approximating rectangles and right endpoints.

$$R_4 = \underline{\hspace{2cm}}$$

(b) Repeat part (a) using left endpoints.

$$L_4 = \underline{\hspace{2cm}}$$

(c) By looking at a sketch of the graph and the rectangles, determine for each estimate whether is overestimates, underestimates, or is the exact area.

☐ 1.  $R_4$ ☐ 2.  $L_4$ 

i!-

Answer(s) submitted:

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(incorrect)