

December 2

What did we learn about integrals
before Thanksgiving?

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Students will verbally explain how to
find the exact area under a curve using
definite integrals

(using the words:
right, left, above, below, antiderivative...)

2. Without changing the value of a , how could you use the values of the accumulation function in question 1 to find $\int_0^3 f(t) dt$? Explain your thinking.

$$-.6 - .6 = \int_{-3}^3 f(t) dt - \int_{-3}^0 f(t) dt$$

3. Without changing the value of a , use the accumulation function and your thinking from question 2 to find the following. For each, be sure to explain your thinking.

a. $\int_1^4 f(t) dt = \frac{\int_{-3}^4 f(t) dt - \int_{-3}^1 f(t) dt}{}$

b. $\int_{-2}^2 f(t) dt = \frac{\int_{-3}^2 f(t) dt - \int_{-3}^{-2} f(t) dt}{}$

c. $\int_0^{-1} f(t) dt = \frac{\int_{-3}^{-1} f(t) dt - \int_{-3}^0 f(t) dt}{}$