Quiz 8: Disk and Washer Method

Instructions: write your solutions to the following two questions on separate sheets of paper. Show all work to receive credit. You will have 25 minutes to complete the Quiz and 10 minutes to upload your solutions to the Crowdmark assessment "Quiz 8" located in the Assignments tab of the **Discussion** iLearn.

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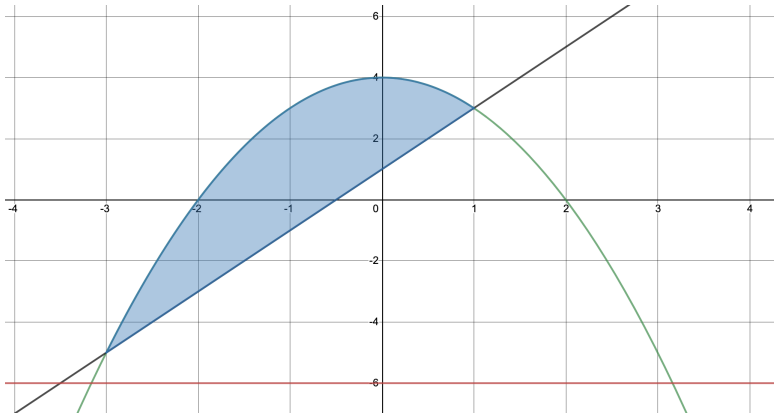
(1) **Set up** a definite integral that computes the volume of the solid generated by revolving the region between the functions $f(x) = 4 - x^2$ and $g(x) = 1 + 2x$ around the horizontal axis $y = -6$.



(2) **Set up** a definite integral that computes the volume of the solid generated by revolving the region between the functions $f(x) = 2x - \frac{1}{2}$ and $g(x) = 1 + \frac{1}{2}x$ and the horizontal line $y = 4$ revolved around vertical axis $x = 0$ (this is the y-axis).