Name : _____ Score : _____

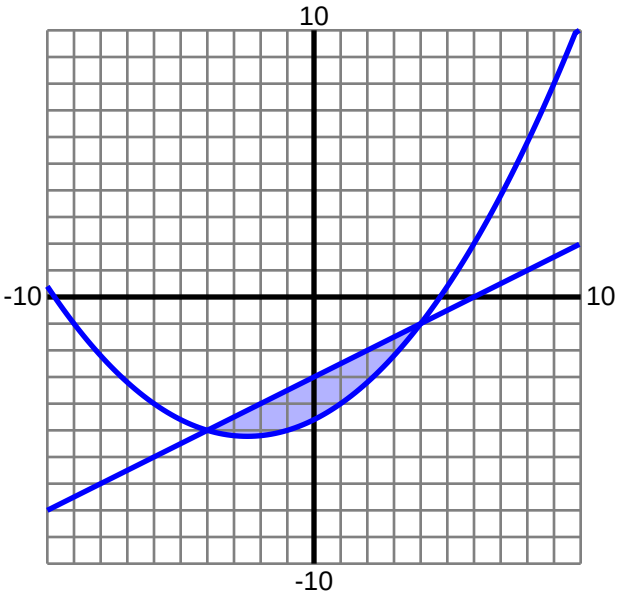
Teacher : _____ Date : _____

Volumes of Washers and Disks

Find the volume of the solid formed by rotating the enclosed region about the specified axis. Use the washer or disk method and round to two decimals.

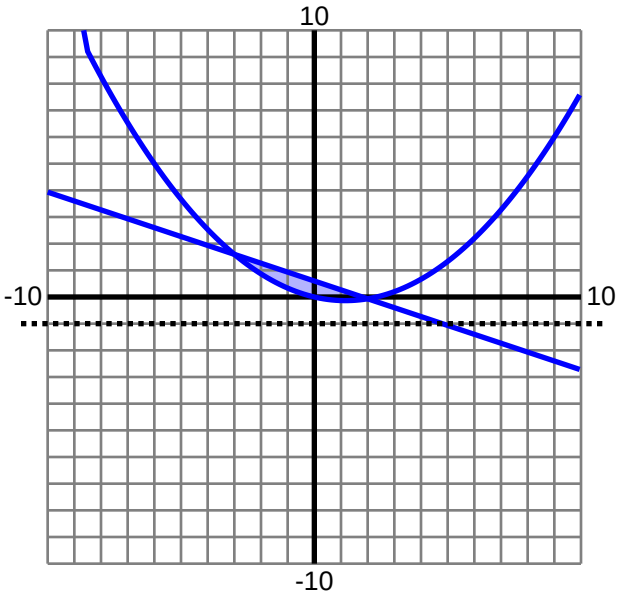
1) $y = \frac{1}{2}x - 3$ Axis: $y = 0$

$y = \frac{1}{10}x^2 + \frac{1}{2}x - \frac{23}{5}$



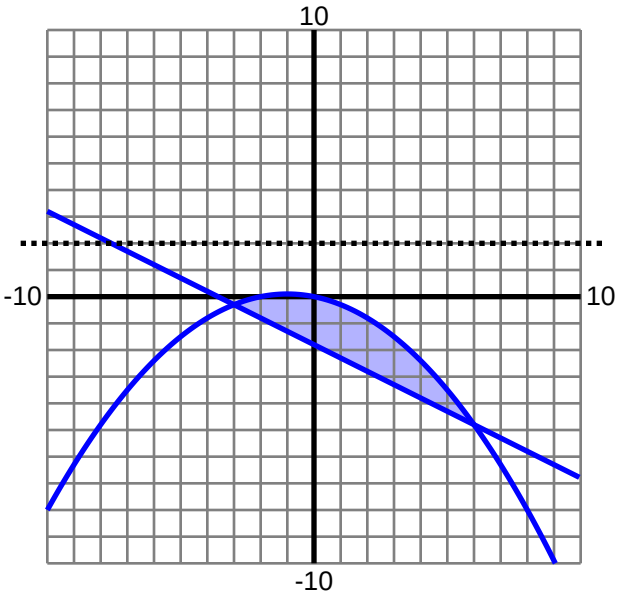
2) $y = -\frac{1}{3}x + \frac{3}{5}$ Axis: $y = -1$

$y = \frac{1}{10}x^2 - \frac{7}{30}x$

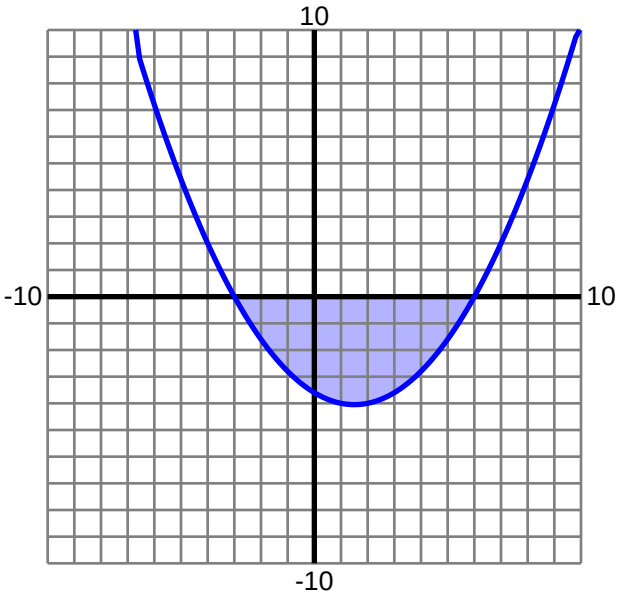


3) $y = -\frac{1}{2}x - \frac{9}{5}$ Axis: $y = 2$

$y = -\frac{1}{10}x^2 - \frac{1}{5}x$



4) $y = \frac{1}{5}x^2 - \frac{3}{5}x - \frac{18}{5}$ Axis: $y = 0$



Name : _____ Score : _____

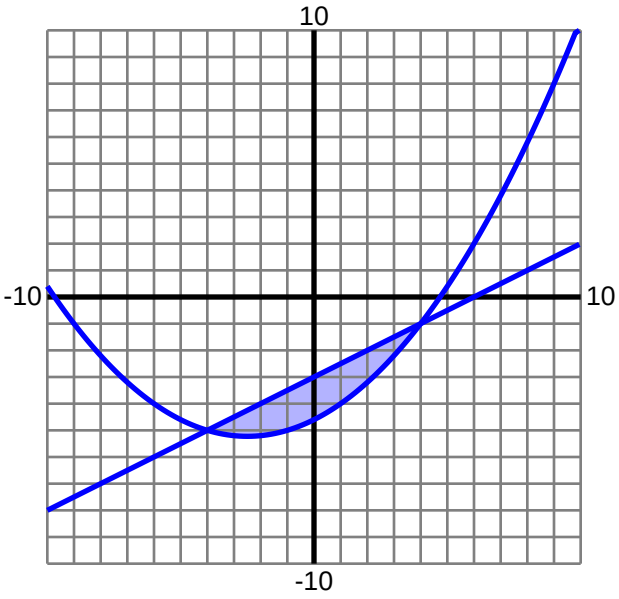
Teacher : _____ Date : _____

Volumes of Washers and Disks

Find the volume of the solid formed by rotating the enclosed region about the specified axis. Use the washer or disk method and round to two decimals.

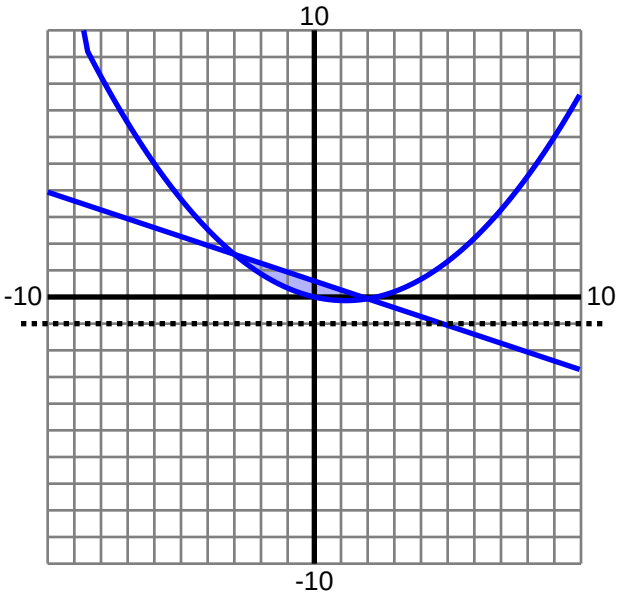
1) $y = \frac{1}{2}x - 3$ Axis: $y = 0$

$y = \frac{1}{10}x^2 + \frac{1}{2}x - \frac{23}{5}$ Volume: 195.16



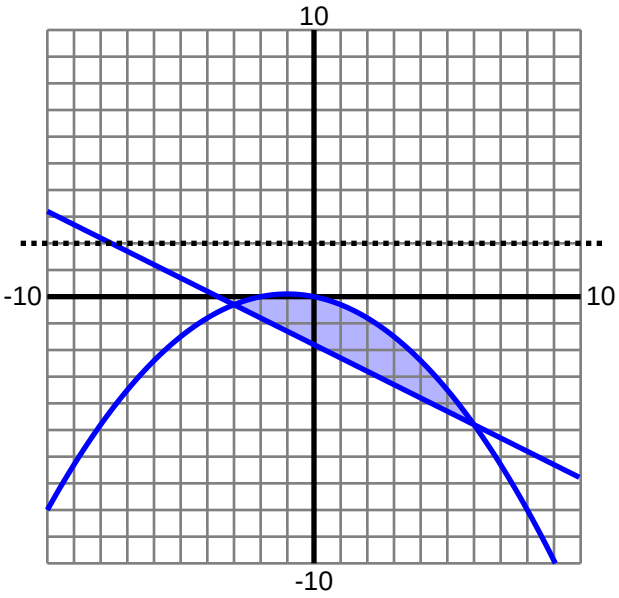
2) $y = -\frac{1}{3}x + \frac{3}{5}$ Axis: $y = -1$

$y = \frac{1}{10}x^2 - \frac{7}{30}x$ Volume: 19.85



3) $y = -\frac{1}{2}x - \frac{9}{5}$ Axis: $y = 2$

$y = -\frac{1}{10}x^2 - \frac{1}{5}x$ Volume: 285.51



4) $y = \frac{1}{5}x^2 - \frac{3}{5}x - \frac{18}{5}$ Axis: $y = 0$

Volume: 247.34