

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.

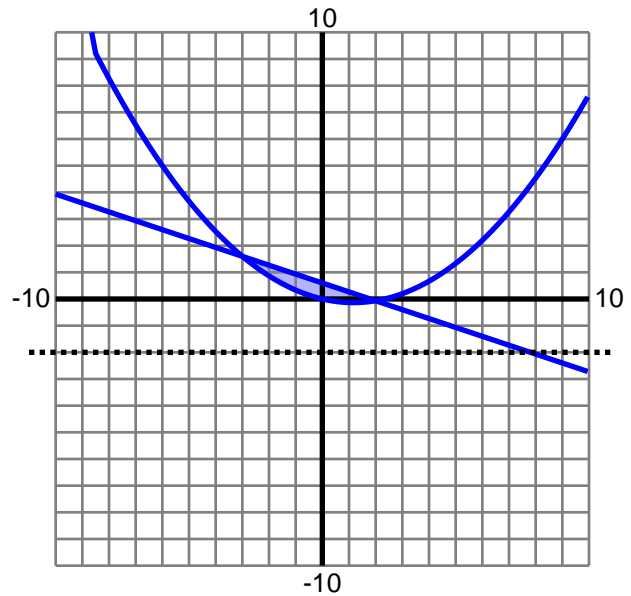
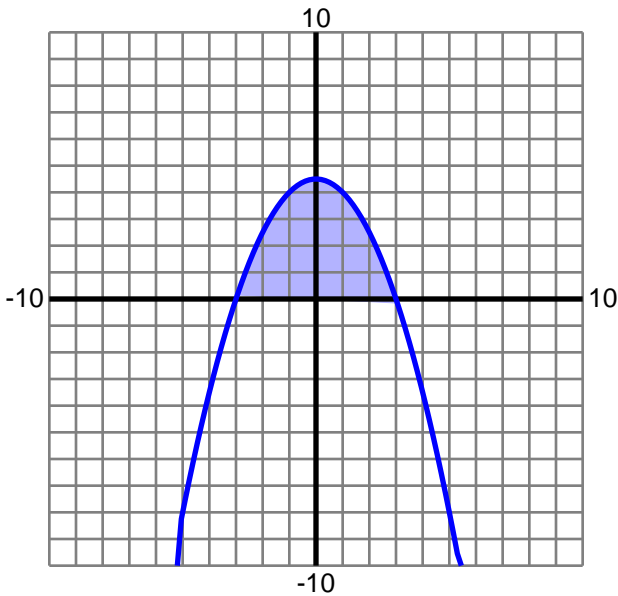
1) $y = -\frac{1}{2}x^2 + \frac{9}{2}$

Axis: $y = 0$

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

Axis: $y = -2$

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



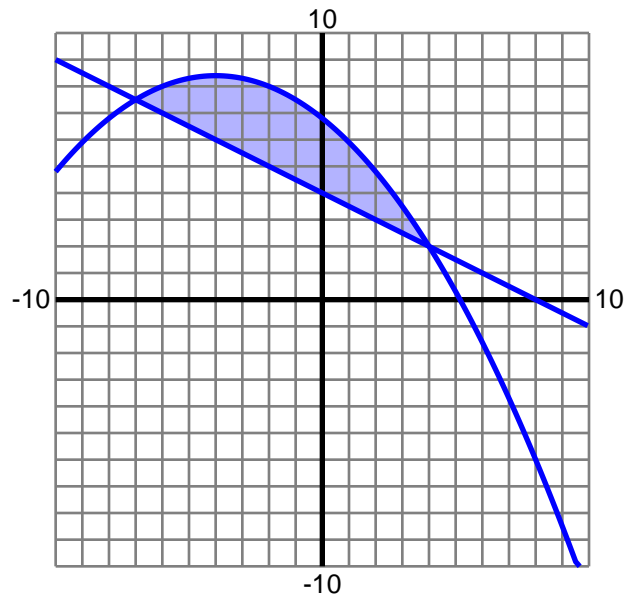
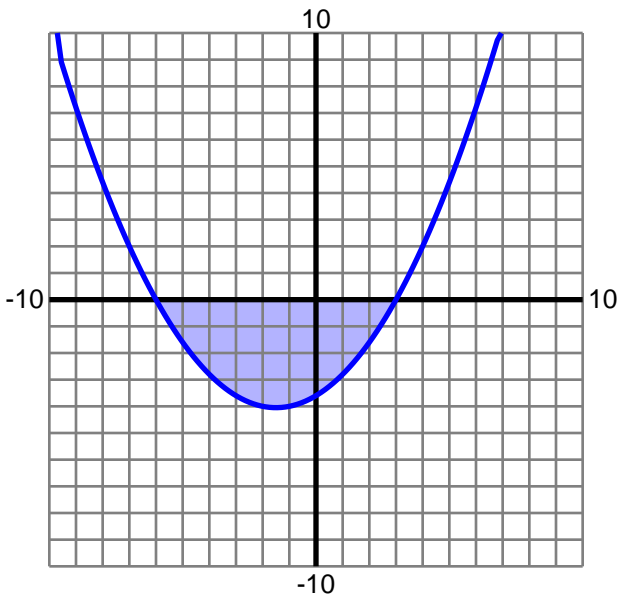
3) $y = \frac{1}{5}x^2 + \frac{3}{5}x - \frac{18}{5}$

Axis: $y = 0$

4) $y = -\frac{1}{2}x + 4$

Axis: $y = 0$

$$y = -\frac{1}{10}x^2 - \frac{4}{5}x + \frac{34}{5}$$



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) $y = -\frac{1}{2}x^2 + \frac{9}{2}$

Axis: $y = 0$

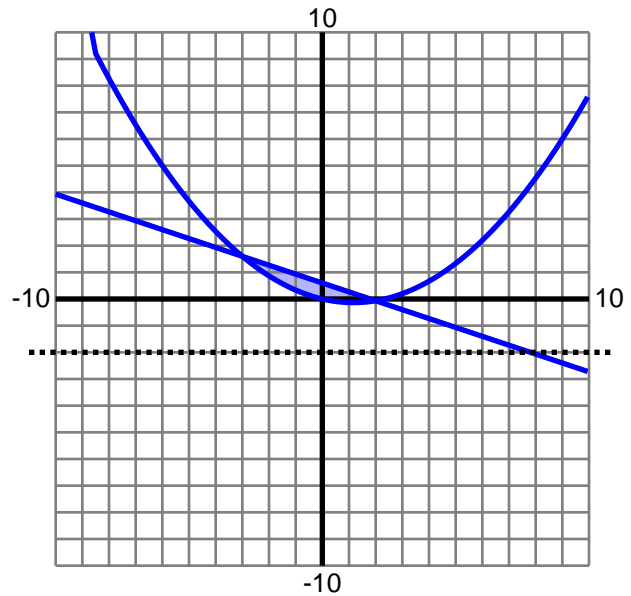
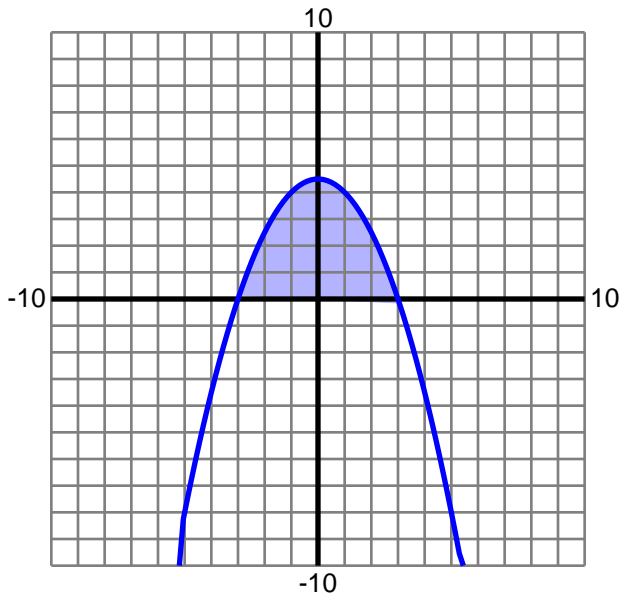
Volume: 203.58

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

Axis: $y = -2$

Volume: 32.94

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



3) $y = \frac{1}{5}x^2 + \frac{3}{5}x - \frac{18}{5}$

Axis: $y = 0$

Volume: 247.34

4) $y = -\frac{1}{2}x + 4$

Axis: $y = 0$

Volume: 830.72

$y = -\frac{1}{10}x^2 - \frac{4}{5}x + \frac{34}{5}$

