

Volumes of Revolution

Determine the method (shells or disks/washers) to use for each region, and find the appropriate information (radius, height, etc.)

1. Rotate the region bounded by $x = 16 - y^2$ and the y -axis about the line:

(a) $y = 0$

(b) $y = 5$

(c) $y = -5$

(d) $x = 0$

(e) $x = 20$

(f) $x = -1$

2. Rotate the region bounded by $y = x$ and $y = \sqrt{x}$ about the line:

(a) $y = 0$

(b) $y = 5$

(c) $y = -5$

(d) $x = 0$

(e) $x = 20$

(f) $x = -1$

(For 2, you can actually use BOTH methods for each rotation.)