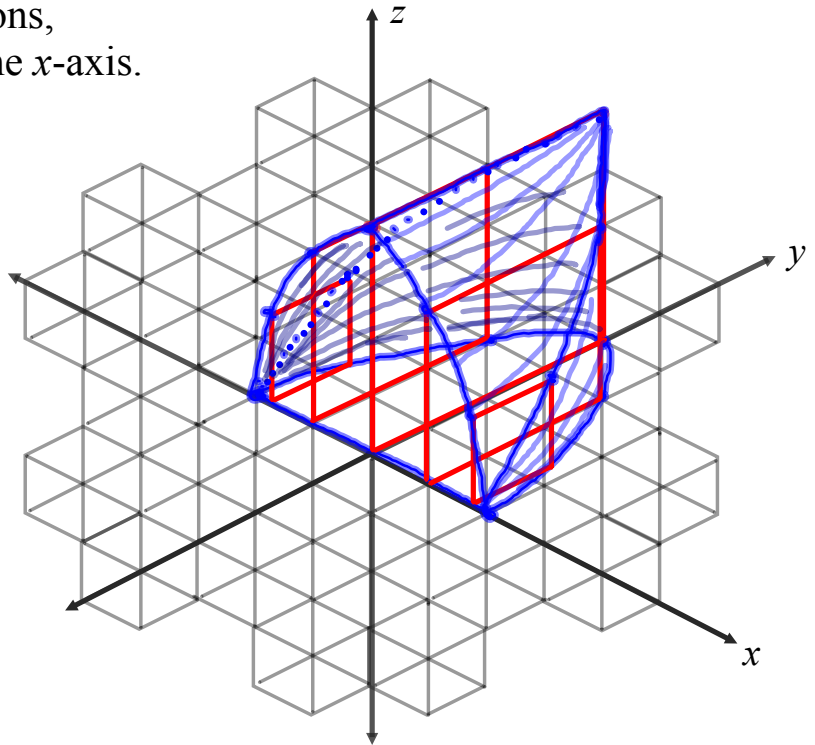


Calculus AB

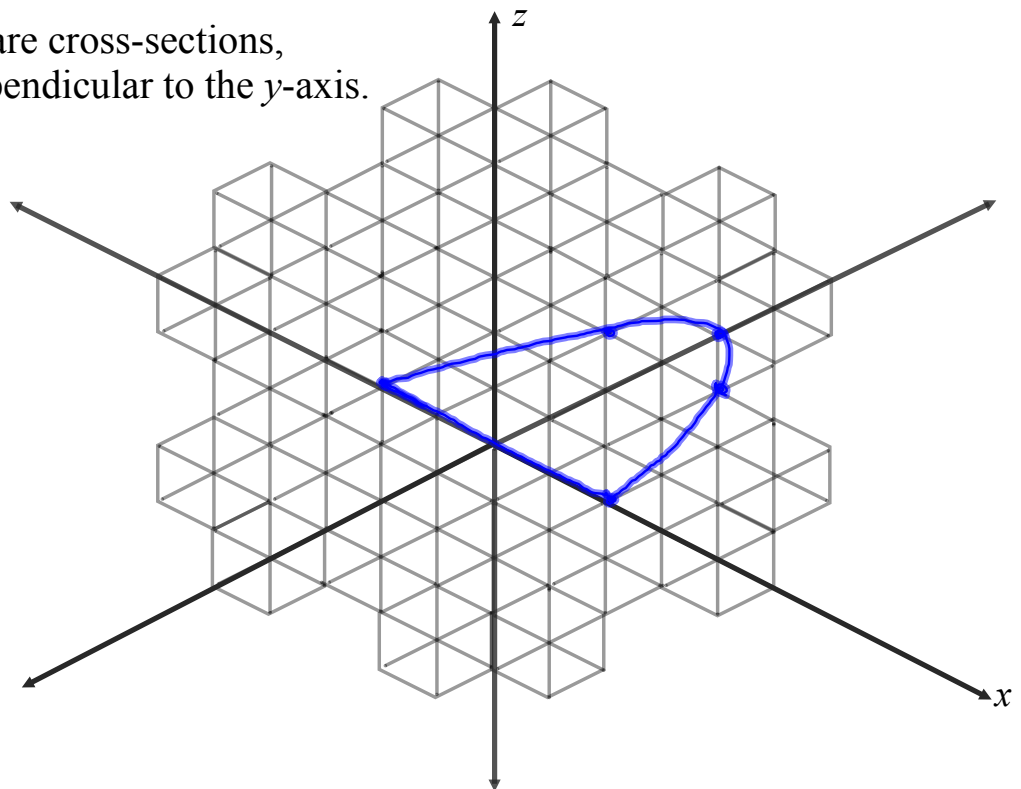
7-2a
Cross Sections

Find each volume using the area of the known cross-section.

- 1) $y = 4 - x^2$; square cross-sections,
 $y = 0$ perpendicular to the x -axis.

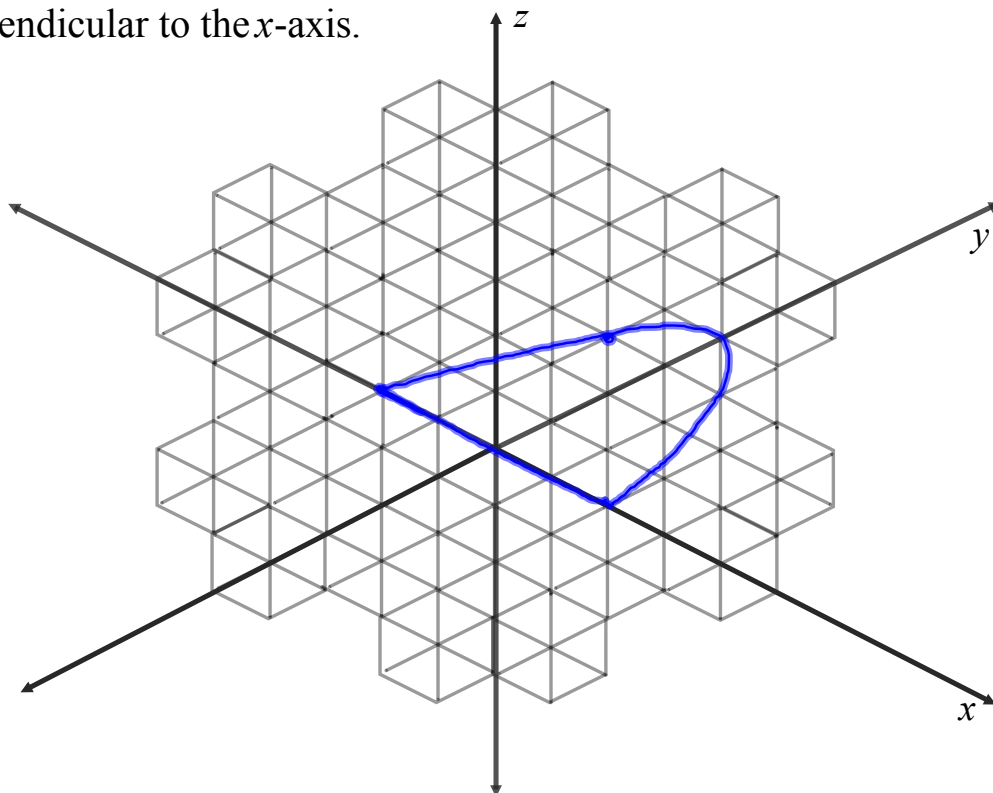


- 2) $y = 4 - x^2$; square cross-sections,
 $y = 0$ perpendicular to the y -axis.

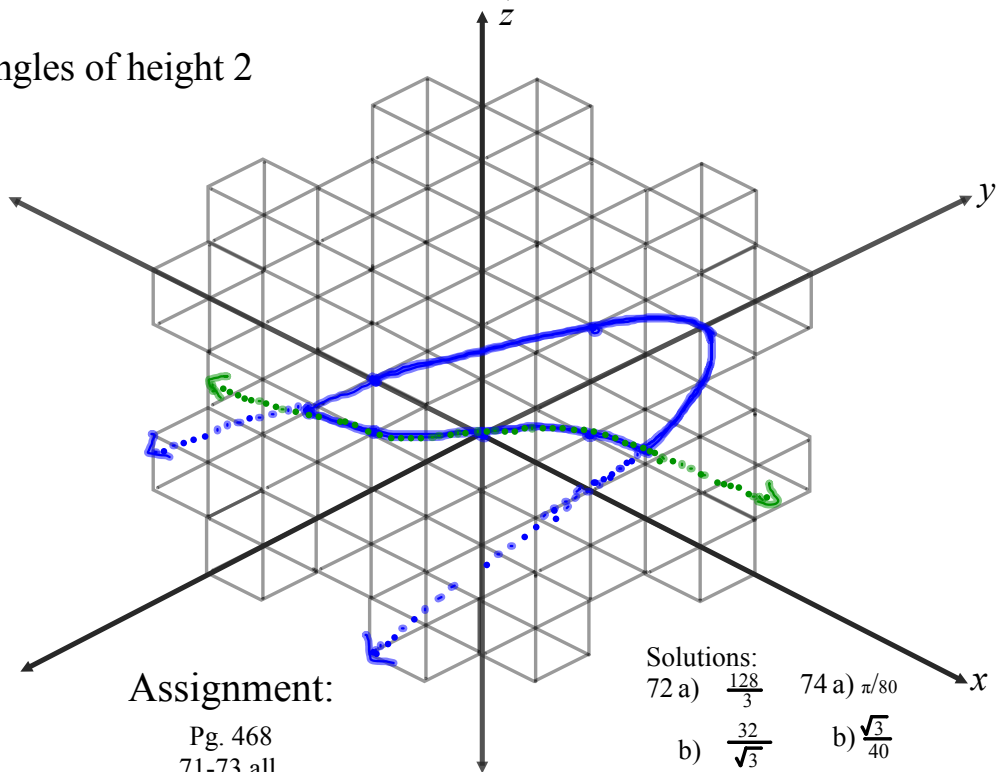


Find each volume using the area of the known cross-section.

- 3) $y = 4 - x^2$; equilateral triangular cross-sections,
 $y = 0$ perpendicular to the x -axis.



- 4) $y = 4 - x^2$; rectangles of height 2
 $y = \sqrt[3]{x}$



Assignment:

Pg. 468
 71-73 all,
 74 a, b, c

Solutions:

- | | |
|--------------------------|--------------------------|
| 72 a) $\frac{128}{3}$ | 74 a) $\pi/80$ |
| b) $\frac{32}{\sqrt{3}}$ | b) $\frac{\sqrt{3}}{40}$ |
| c) $\frac{16\pi}{3}$ | c) $\pi/20$ |
| d) $\frac{32}{3}$ | |