## 8.1 (Slice and Conquer) Turn up the Volume

1. Sketch a graph of the object you want to find the volume of
2. Sketch a picture of a Riemann slice on your graph
3. What shape is it? Circle: box (length $\cdot$ width $\cdot$ height) or cylinder/disk $\left(\pi \cdot\right.$ radius $^{2} \cdot$ height $)$
4. Infinitesimal part of the slice? Circle: $\Delta x$ or $\Delta y$
5. Sketch a diagram and show work to solve for any lengths you need
6. Circle any we used: Pythagorean theorem or similar triangles
7. What is the Riemann sum approximation? $\sum$
8. What is $a$ and $b$ ?
9. Write the integral?
10. Sketch a graph of the object you want to find the volume of
11. Sketch a picture of a Riemann slice on your graph
12. What shape is it? Circle: box (length $\cdot$ width $\cdot$ height) or cylinder/disk $\left(\pi \cdot\right.$ radius $^{2} \cdot$ height $)$
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16. What is $a$ and $b$ ?
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18. Sketch a graph of the object you want to find the volume of
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22. Sketch a diagram and show work to solve for any lengths you need
23. Circle any we used: Pythagorean theorem or similar triangles
24. What is the Riemann sum approximation? $\sum$
25. What is $a$ and $b$ ?
26. Write the integral?
