Classroom Voting Questions: Calculus II

Section 8.1 Areas and Volumes

1. If we slice a cone with a circular base parallel to the $x$-axis, the resulting slices would look like
   
   (a) Circles  
   (b) Triangles  
   (c) Cylinders with a circular base  
   (d) Cylinders with a triangular base  
   (e) Cones

2. If we slice a cone with a circular base parallel to the $x$-axis, then the thickness of the slices is given by
   
   (a) $\Delta x$  
   (b) $\Delta y$  
   (c) $x$  
   (d) $y$

3. If we put the tip of a cone with a circular base at the origin and let it open upward, and then slice the cone parallel to the $x$-axis, then the cross-sectional area of the slices
   
   (a) Is constant  
   (b) Increases as $y$ increases  
   (c) Decreases as $y$ increases