Name: _____ Date: _____ Pd. _____ 2017

AP Calculus – Worksheet 7.3a – Cross-Sectional Volume – Show All Work to Receive Credit

Graph each solid in 3D and show the cross sections and find the volume of the solid.

1. The base of a solid is given by the area enclosed by $\frac{x^2}{25}+\frac{y^2}{9}=1$.

   a. The cross sections perpendicular to the $x-\text{axis}$ are squares.

   b. The cross sections perpendicular to the $x-\text{axis}$ are equilateral triangles.

Name: _____ Date: _____ Pd. _____ 2017

AP Calculus – Worksheet 7.3a – Cross-Sectional Volume – Show All Work to Receive Credit

Graph each solid in 3D and show the cross sections and find the volume of the solid.

1. The base of a solid is given by the area enclosed by $\frac{x^2}{25}+\frac{y^2}{9}=1$.

   a. The cross sections perpendicular to the $x-\text{axis}$ are squares.

   b. The cross sections perpendicular to the $x-\text{axis}$ are equilateral triangles.

2. The base of a solid is given by the area enclosed by $(x-2)^2+y^2=9$.
    a. The cross sections perpendicular to the $x-\text{axis}$ are squares.

    b. The cross sections perpendicular to the $x-\text{axis}$ are equilateral triangles.

2. The base of a solid is given by the area enclosed by $(x-2)^2+y^2=9$.
    a. The cross sections perpendicular to the $x-\text{axis}$ are squares.

    b. The cross sections perpendicular to the $x-\text{axis}$ are equilateral triangles.