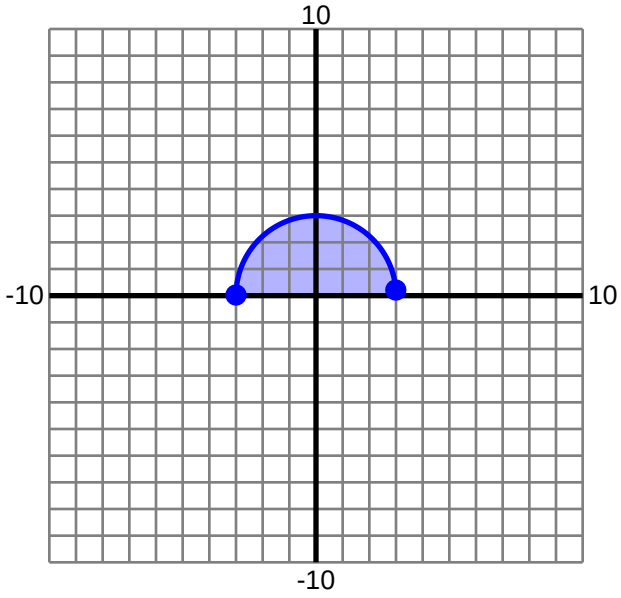
Name : _____ Score : _____

Teacher : _____ Date : _____

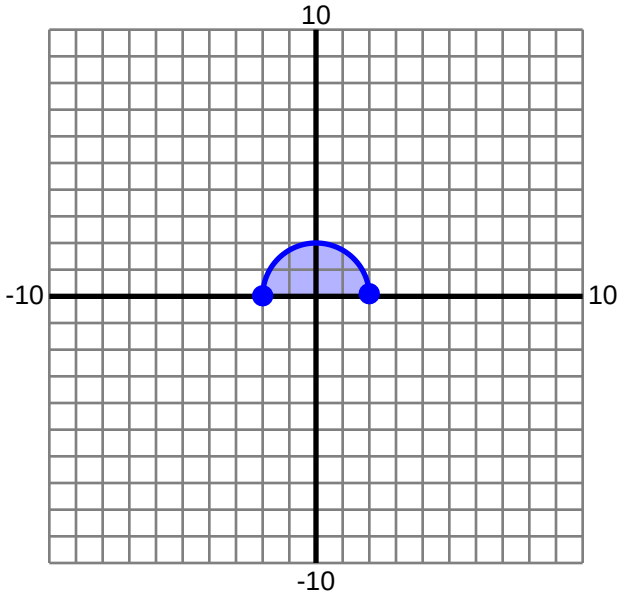
# Volume Using Cross Sections

**Find the volume of the specified solid. Round to two decimals if necessary.**

1) The base of a solid is the region enclosed by $y = \sqrt{9 - x^2}$ and the x-axis. Cross-sections perpendicular to the x-axis are right isoceles triangles, with the hypotenuse on the base.




2) The base of a solid is the region enclosed by $y = \sqrt{4 - x^2}$ and the x-axis. Cross-sections perpendicular to the x-axis are right isoceles triangles, with the hypotenuse on the base.



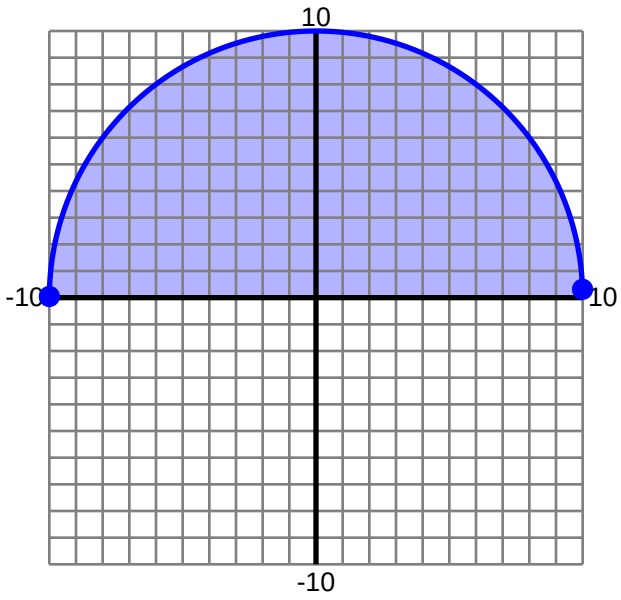
Name : _____ Score : _____

Teacher : _____ Date : _____

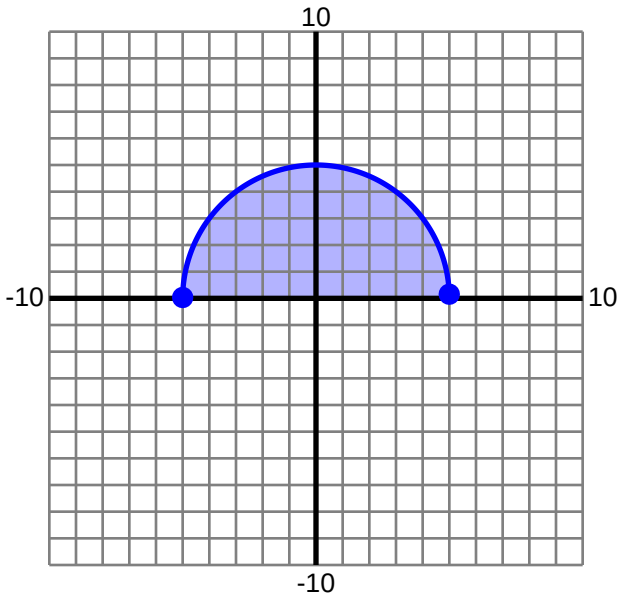
# Volume Using Cross Sections

**Find the volume of the specified solid. Round to two decimals if necessary.**

3) The base of a solid is the region enclosed by $y = \sqrt{100 - x^2}$ and the x-axis. Cross-sections perpendicular to the x-axis are right isoceles triangles, with the hypotenuse on the base.




4) The base of a solid is the region enclosed by $y = \sqrt{25 - x^2}$ and the x-axis. Cross-sections perpendicular to the x-axis are right isoceles triangles, with the hypotenuse on the base.



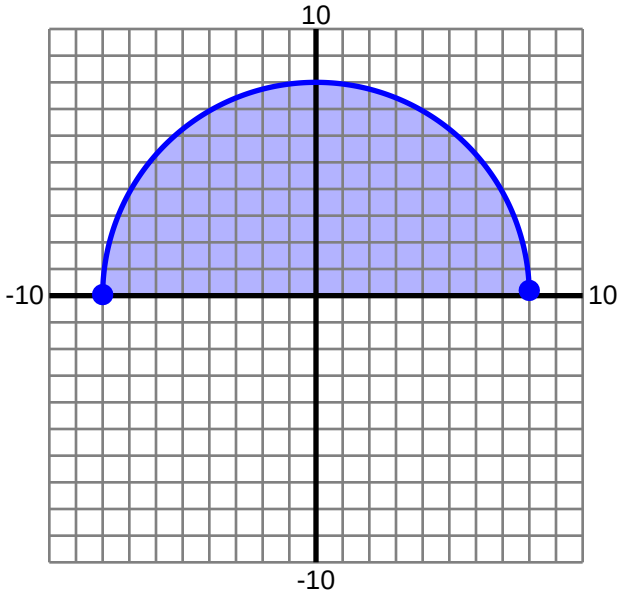
Name : _____ Score : _____

Teacher : _____ Date : _____

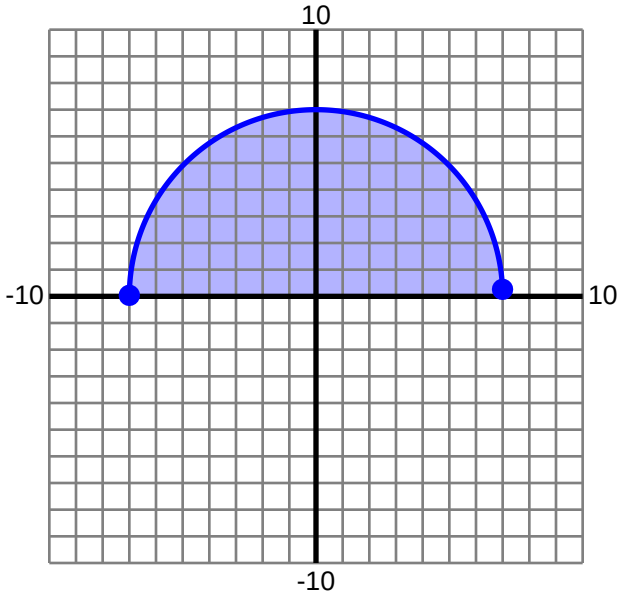
# Volume Using Cross Sections

**Find the volume of the specified solid. Round to two decimals if necessary.**

5) The base of a solid is the region enclosed by $y = \sqrt{64 - x^2}$ and the x-axis. Cross-sections perpendicular to the x-axis are right isoceles triangles, with the hypotenuse on the base.




6) The base of a solid is the region enclosed by $y = \sqrt{49 - x^2}$ and the x-axis. Cross-sections perpendicular to the x-axis are right isoceles triangles, with the hypotenuse on the base.



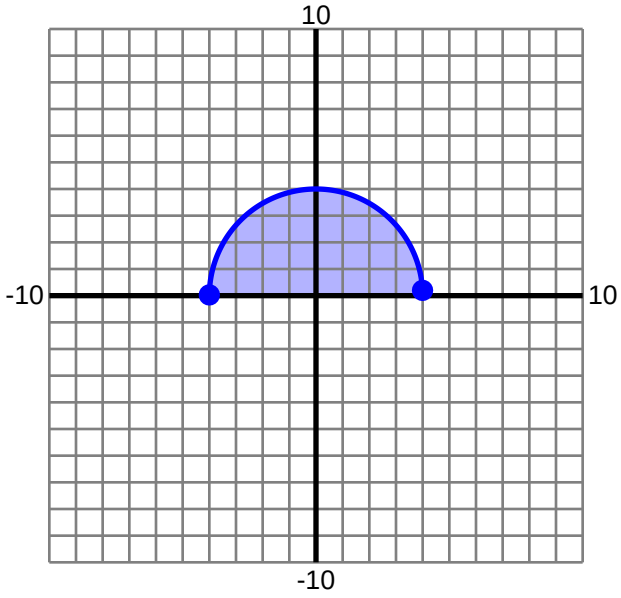
Name : _____ Score : _____

Teacher : _____ Date : _____

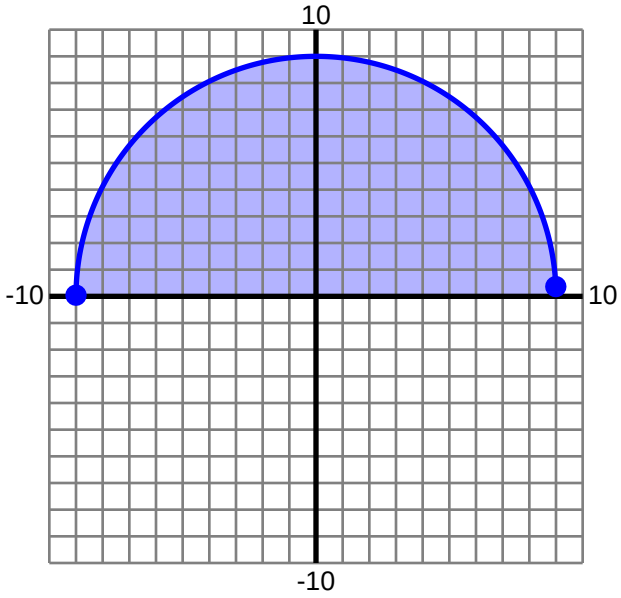
# Volume Using Cross Sections

**Find the volume of the specified solid. Round to two decimals if necessary.**

7) The base of a solid is the region enclosed by $y = \sqrt{16 - x^2}$ and the x-axis. Cross-sections perpendicular to the x-axis are right isoceles triangles, with the hypotenuse on the base.




8) The base of a solid is the region enclosed by $y = \sqrt{81 - x^2}$ and the x-axis. Cross-sections perpendicular to the x-axis are right isoceles triangles, with the hypotenuse on the base.



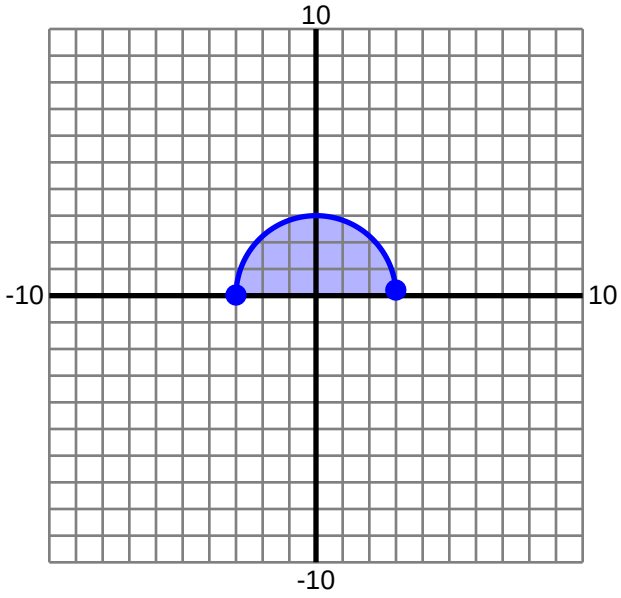
Name : _____ Score : _____

Teacher : _____ Date : _____

# Volume Using Cross Sections

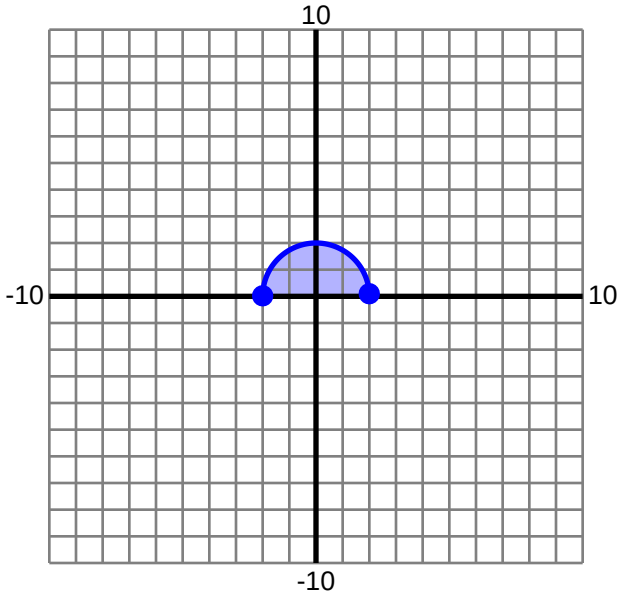
**Find the volume of the specified solid. Round to two decimals if necessary.**

1) The base of a solid is the region enclosed by $y = \sqrt{9 - x^2}$ and the x-axis. Cross-sections perpendicular to the x-axis are right isoceles triangles, with the hypotenuse on the base.




Volume = 9

2) The base of a solid is the region enclosed by $y = \sqrt{4 - x^2}$ and the x-axis. Cross-sections perpendicular to the x-axis are right isoceles triangles, with the hypotenuse on the base.




Volume = 2.67

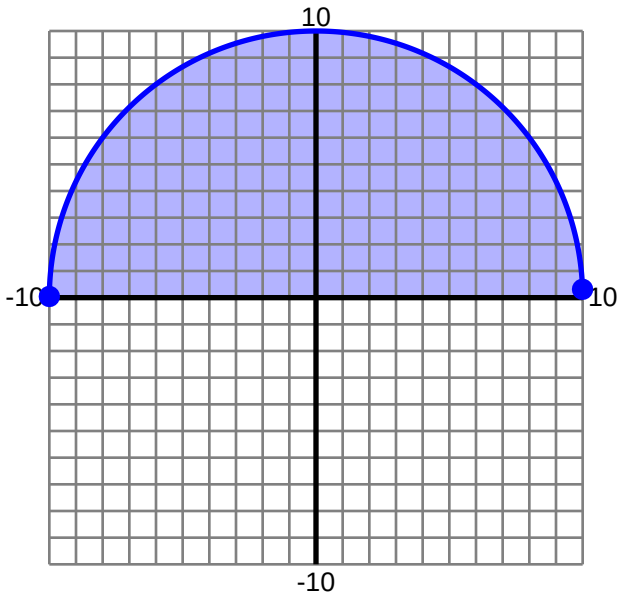
Name : _____ Score : _____

Teacher : _____ Date : _____

# Volume Using Cross Sections

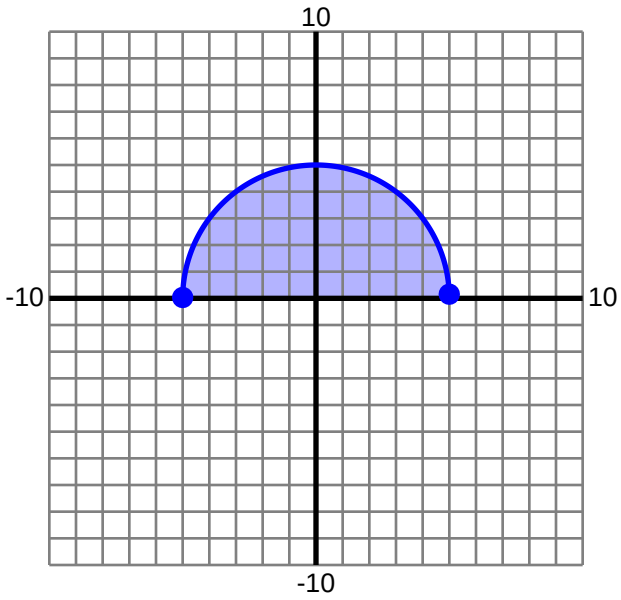
**Find the volume of the specified solid. Round to two decimals if necessary.**

3) The base of a solid is the region enclosed by $y = \sqrt{100 - x^2}$ and the x-axis. Cross-sections perpendicular to the x-axis are right isoceles triangles, with the hypotenuse on the base.




Volume = 333.33

4) The base of a solid is the region enclosed by $y = \sqrt{25 - x^2}$ and the x-axis. Cross-sections perpendicular to the x-axis are right isoceles triangles, with the hypotenuse on the base.




Volume = 41.67

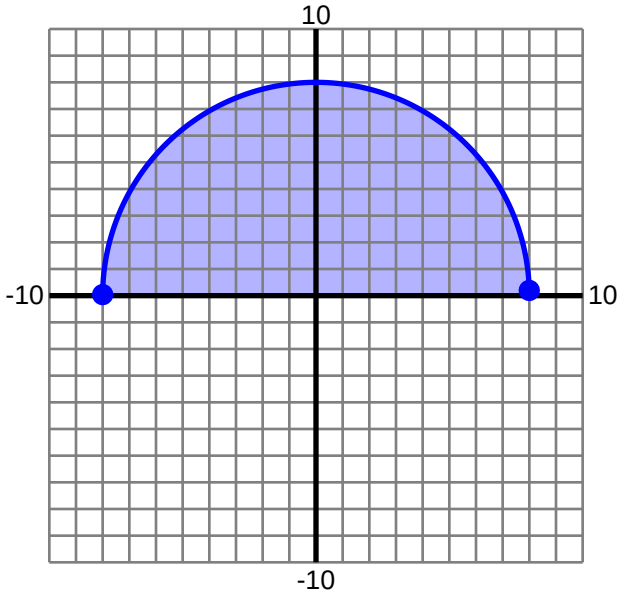
Name : _____ Score : _____

Teacher : _____ Date : _____

# Volume Using Cross Sections

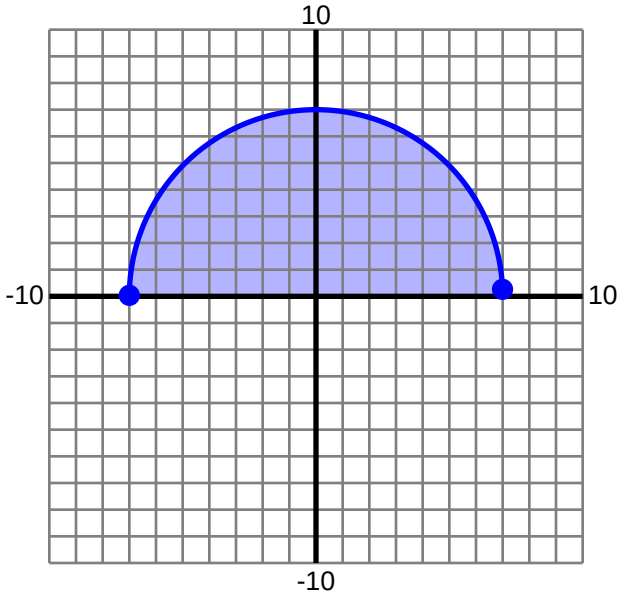
**Find the volume of the specified solid. Round to two decimals if necessary.**

5) The base of a solid is the region enclosed by $y = \sqrt{64 - x^2}$ and the x-axis. Cross-sections perpendicular to the x-axis are right isoceles triangles, with the hypotenuse on the base.




Volume = 170.67

6) The base of a solid is the region enclosed by $y = \sqrt{49 - x^2}$ and the x-axis. Cross-sections perpendicular to the x-axis are right isoceles triangles, with the hypotenuse on the base.




Volume = 114.33

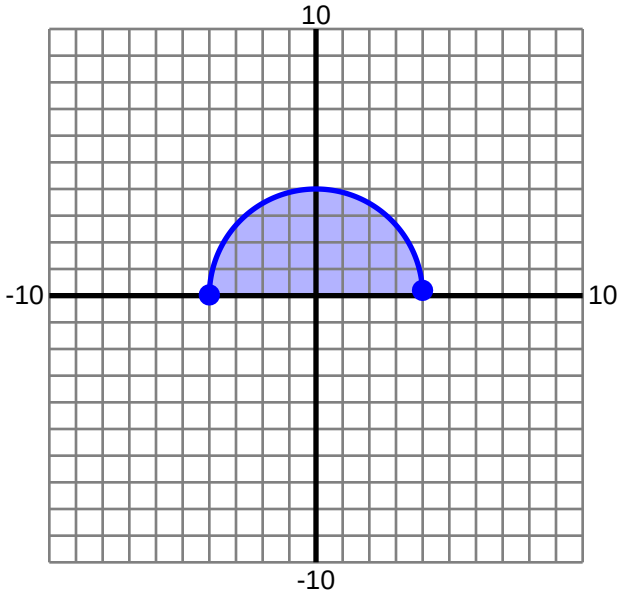
Name : _____ Score : _____

Teacher : _____ Date : _____

# Volume Using Cross Sections

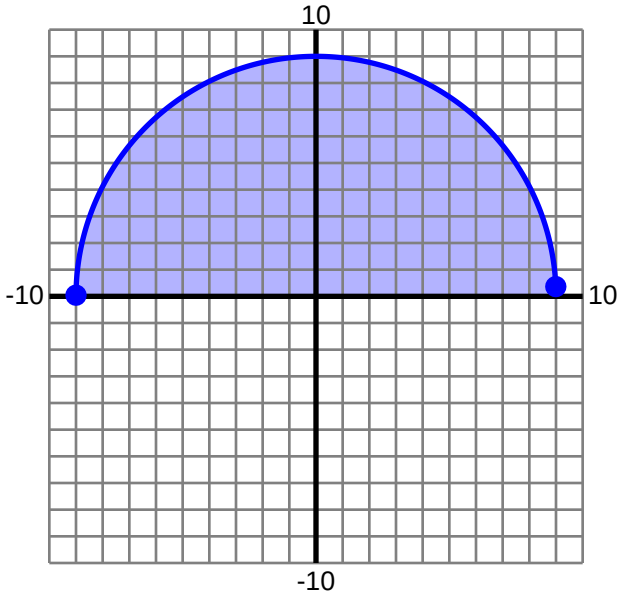
**Find the volume of the specified solid. Round to two decimals if necessary.**

7) The base of a solid is the region enclosed by $y = \sqrt{16 - x^2}$ and the x-axis. Cross-sections perpendicular to the x-axis are right isoceles triangles, with the hypotenuse on the base.




Volume = 21.33

8) The base of a solid is the region enclosed by $y = \sqrt{81 - x^2}$ and the x-axis. Cross-sections perpendicular to the x-axis are right isoceles triangles, with the hypotenuse on the base.




Volume = 243