

**MA 350 Dr. G. Stoudt**  
**Fourth Reading Assignment**

## Readings

- Biography of Hippocrates, page 58
- Reading 17: From *Commentary on Aristotle's Physics A 2*-Philoponus
- Reading 18: From *Commentary on Aristotle's Physics A 2* (Quadrature of Lunules)-Philoponus  
(To the end of the left hand side of page 60)

## Notes for the Readings

*Elements* XII.2: Circles are to one another as the squares on the diameters.

*Elements* III. Def 11: Similar segments of circles are those which admit equal angles, or in which the angles equal one another.

*Elements* III.33: On a given straight line to describe a segment of a circle admitting an angle equal to a given rectilineal angle.

## Questions for Discussion

It might help if you label the parts of the diagram as you go through the reading. Label lengths and areas in the diagram.

1. What is the lunule in the diagram on page 60 of which we are finding the area?
2. What is a segment of a circle and what is its base? Describe these in the diagram on page 60.
3. Draw two circles and similar segments in them.
4. What does the expression “similar segments of circles have the same ratios as the squares of their bases” mean in terms of the diagram and areas of parts of the diagram?
5. How would a Greek of this era know that the triangle in the semicircle is a right triangle?