

Geometry CC – Mr. Valentino

Name: _____

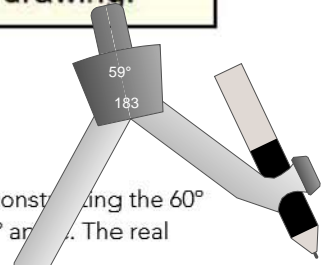
Unit 2 Lesson 6: Creating Angles of Specific Measure

Date: _____ Period: _____

Reminder: Use only your compass and straight edge when drawing a construction. No free-hand drawing!

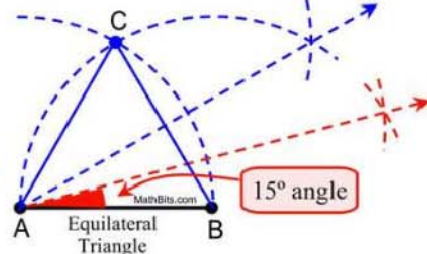
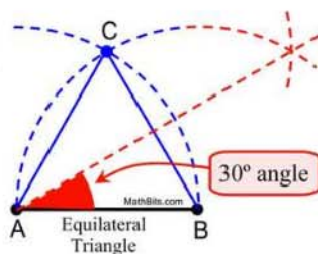
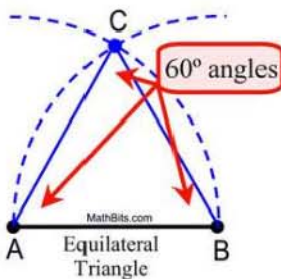
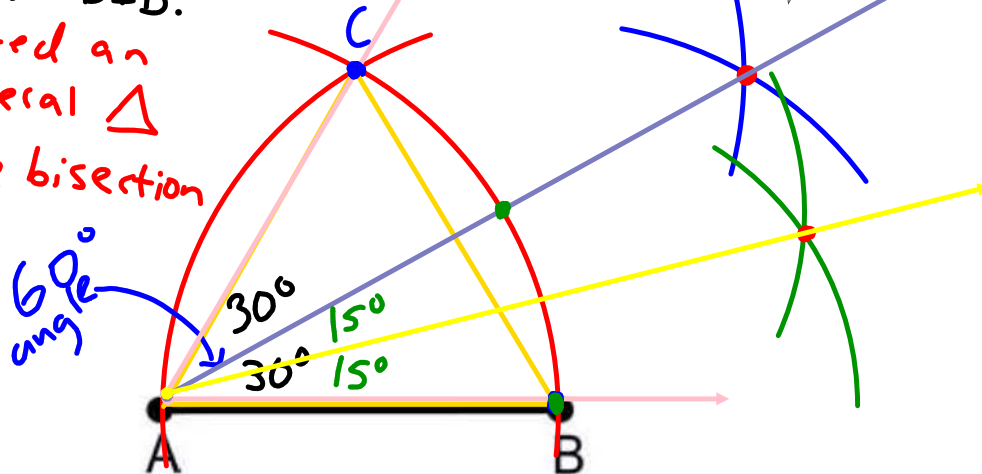
Angles of 60°, 30° or 15°

All of these angles can be constructed, if you can construct the 60° angle. After constructing the 60° angle, simply **bisect** it to obtain the 30° angle, and **bisect** again to get the 15° angle. The real question is, where have we seen the construction of the 60° angle before?



WHAT WE DID:

- Created an equilateral \triangle
- angle bisection



Angles of 90° or 45°

Both of these angles can be constructed, if you can construct a perpendicular (which creates a right angle containing 90°). Bisecting a 90° angle will create a 45° angle. We have seen three constructions of perpendiculars: a perpendicular bisector, a perpendicular from a point on a line, and a perpendicular from a point off a line.

