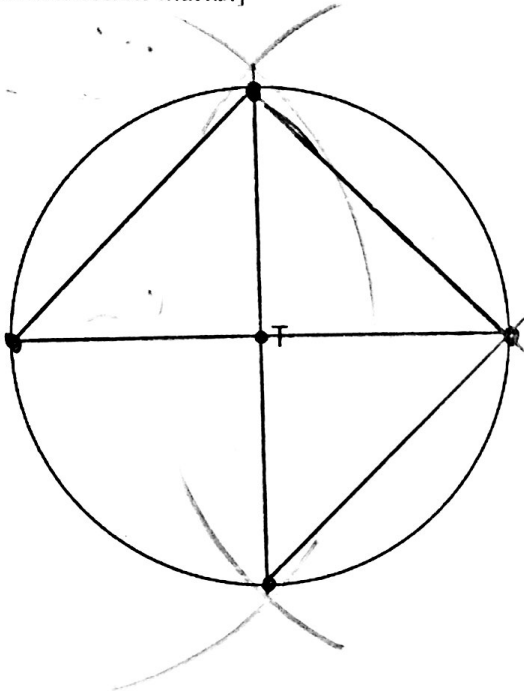


Name: _____
 Date: _____
 Class: _____

Geometry
 Unit C
 HW C-4

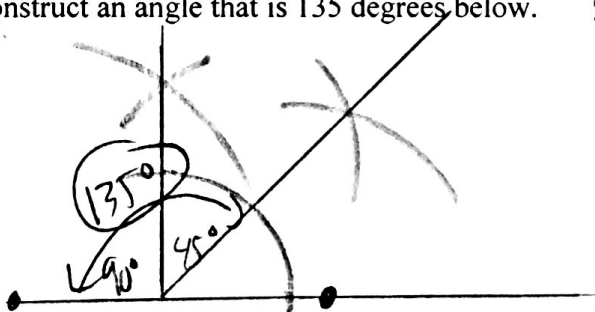
1)

Use a compass and straightedge to construct an inscribed square in circle T shown below.
 [Leave all construction marks.]



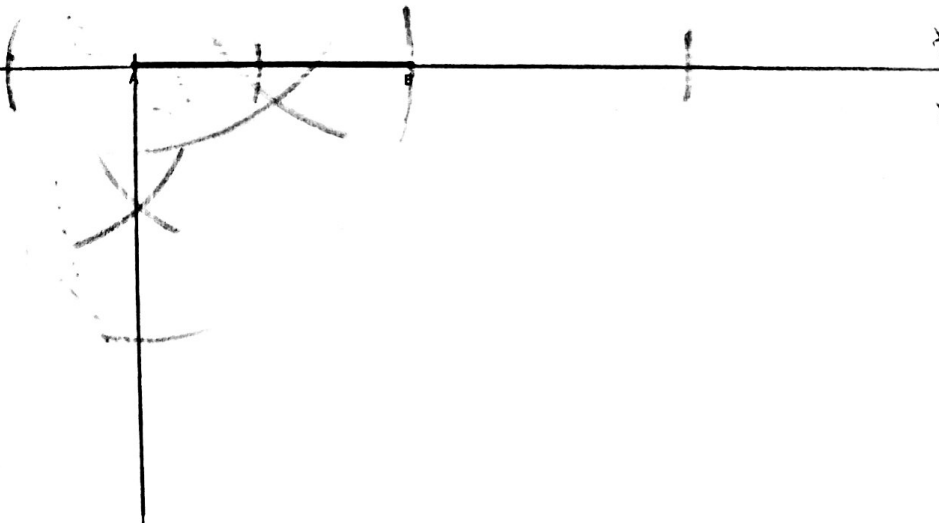
* draw diameter
 * \perp bisect diameter
 * This gives 2 \perp lines that can be the diagonals of the square

2) Construct an angle that is 135 degrees below.



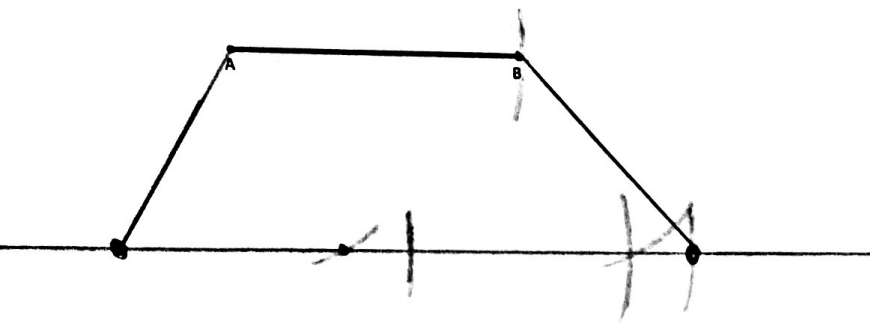
* $90^\circ + 45^\circ$
 * bisect rt \angle

3) Construct a rectangle that has side lengths x and $2x$ ($AB = 2x$)



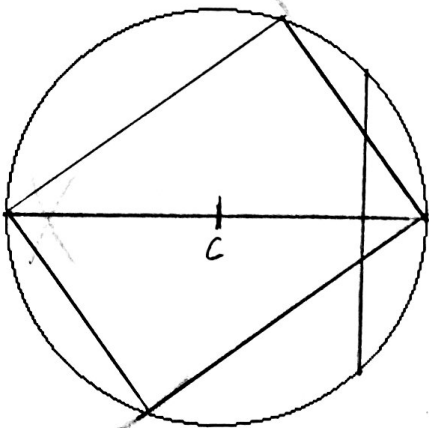
* make rt \angle at A or B
 * make ~~side~~ ^{AB} $2x$ long
 * create \square w/ 3 pts

4) Construct a trapezoid that has base lengths x and $2x$ ($AB = x$)



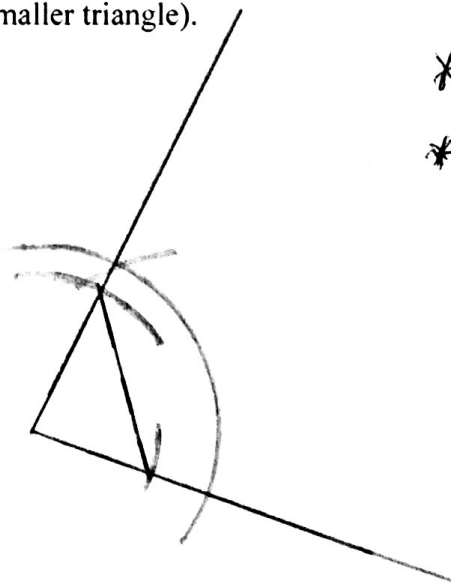
- * make a \parallel line through a pt not on \overline{AB} for bases
- * make new base $2x$
- * connect pt

5) Construct a rectangle that is inscribed in the following circle:



- * find center of circle (make chord, \perp bisect for diameter, \perp bisect for center)
- * create an inscribed \angle w/ $\frac{1}{2}$ circle as arc (90°)
- * copy side lengths to other side of diameter

6) Construct a triangle that is similar to the following triangle with a scale factor of $\frac{1}{2}$ (meaning the triangle you create is the smaller triangle).



- * copy one \angle
- * find m.p. of 2 sides creating that \angle
- * copy $\frac{1}{2}$ length to new Δ