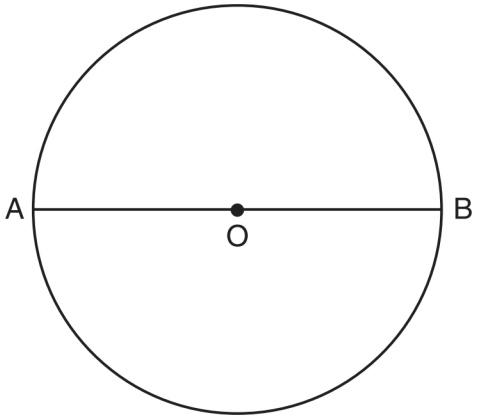
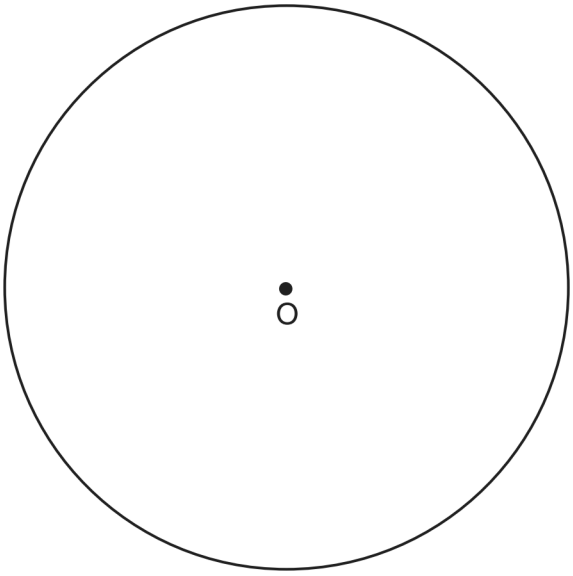
Constructions - due Wednesday 9/26 **Name:** _____

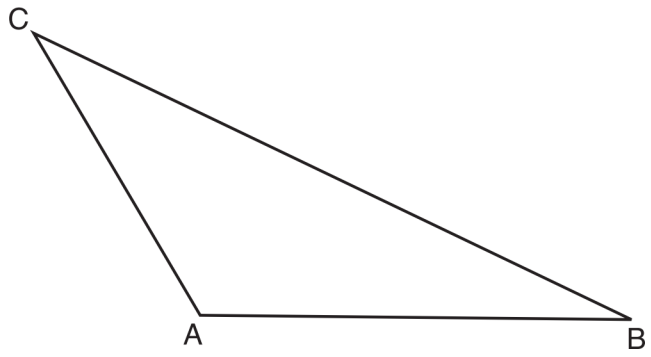
1. The diagram below shows circle O with diameter $\overline{AB}$. Using a compass and straightedge, construct a square that is inscribed in circle O. [Leave all construction marks.]



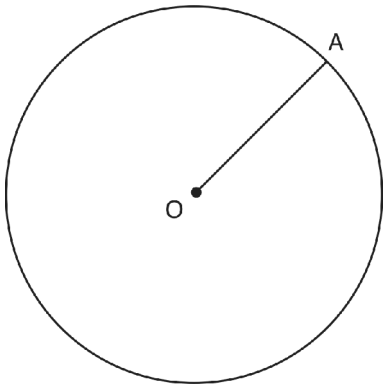
2. Using a compass and straightedge, construct a regular hexagon inscribed in circle O. [Leave all construction marks.]



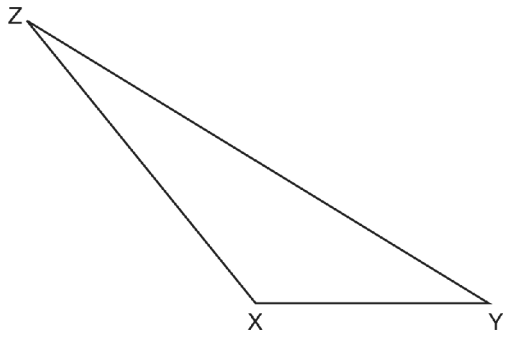
3. In the diagram of $\triangle ABC$ shown below, use a compass and straightedge to construct the median to $\overline{AB}$. [Leave all construction marks.]



4. In the diagram below, radius $\overline{OA}$ is drawn in circle O. Using a compass and a straightedge, construct a line tangent to circle O at point A (this explanation is was NOT on exam: perpendicular to $\overline{OA}$ passing through point A).

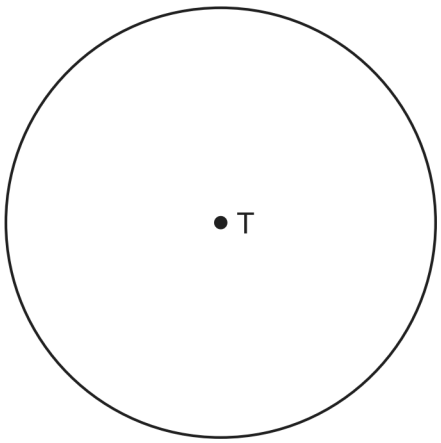


5. Triangle XYZ is shown below. Using a compass and straightedge, on the line below, construct and label $\triangle ABC$, such that $\triangle ABC \cong \triangle XYZ$.

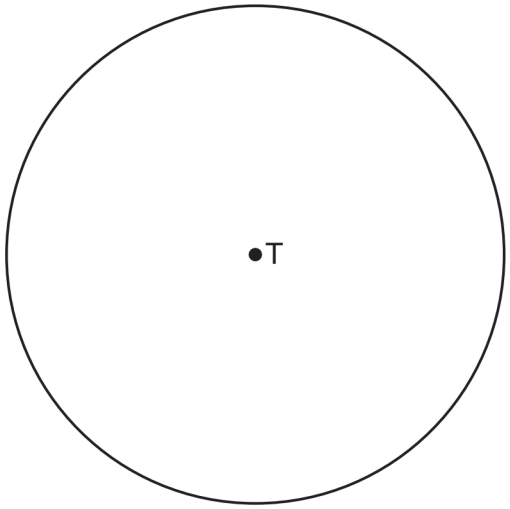


6. Construct an equilateral triangle inscribed in circle T shown below.

[Leave all construction marks.]

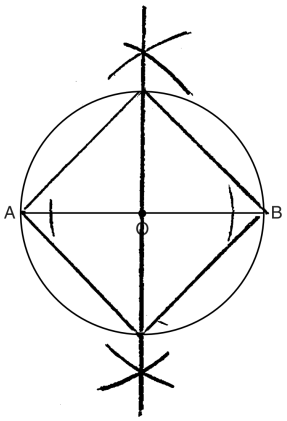


7. Use a compass and straightedge to construct an inscribed square in circle T shown below. [Leave all construction marks.]



Constructions - due Wednesday 9/26 9/24/2018

1.
Answer:



2.
Answer: [construction]

3.
Answer: [construction]

4.
Answer: [construction]

5.
Answer: A correct construction of $\triangle ABC \cong \triangle XYZ$ is drawn showing all construction arcs. A correct theorem is stated to justify why the triangles are congruent.

6.
Answer: [drawing]

7.
Answer: [answers vary] A correct construction is drawn showing all appropriate arcs.