Homework Check:

1. 50°
2. 55°
3. 30°
4. 105°
5. 76 in

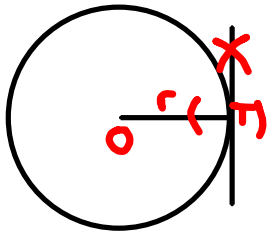
17. Angles A and B must be right angles, but this would make the sum of the angle measures in the quadrilateral shown greater than 360°.

18. a. rhombus
    b. rectangle
    c. kite
    d. parallelogram

19. $x + 55° + 55° = 180°$ and $40° + y + y = 180°$, so $x = y = 70°$

ADD NUMBER 8

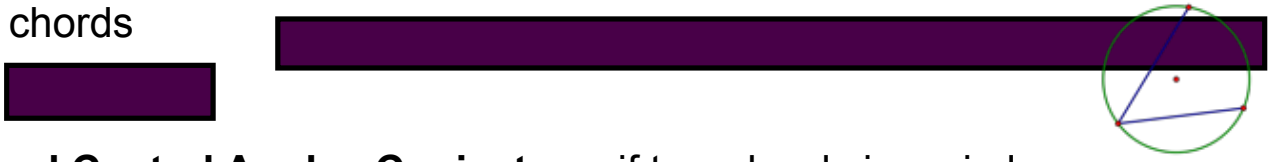
8. Construct $\overrightarrow{OT}$. Construct a line through point T perpendicular to $\overrightarrow{OT}$



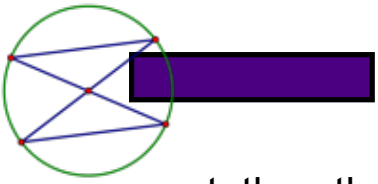
9.2 Investigation on page 458

Central Angle: An angle that has its vertex at the center of the circle

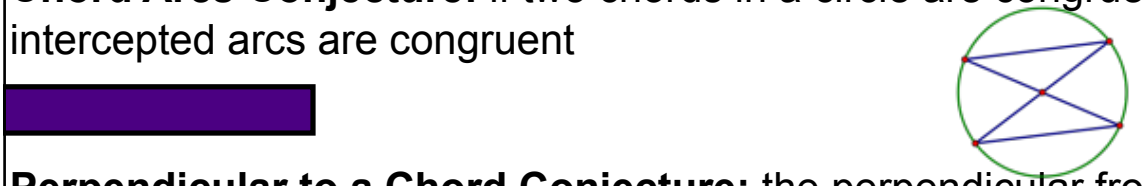
Inscribed Angle: An angle that has its vertex on the circle and its sides are chords



Chord Central Angles Conjecture: if two chords in a circle are congruent, then they determine two central angles that are congruent



Chord Arcs Conjecture: if two chords in a circle are congruent, then their intercepted arcs are congruent



Perpendicular to a Chord Conjecture: the perpendicular from the center of a circle to a chord is the bisector of the chord

Chord Distance to Center Conjecture: two congruent chords in a circle are equidistant from the center of the circle

Perpendicular Bisector to a Chord Conjecture: the perpendicular bisector of a chord passes through the center of the circle

Exit Ticket

What's needed to ensure that two arcs have the same size and shape?