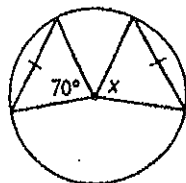


EE

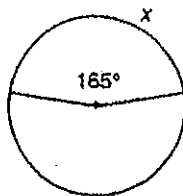
EXERCISE SET A

Use your new conjectures to solve each problem below. Which conjecture supports your conclusion?

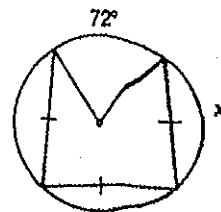
1. $x = \text{---}$



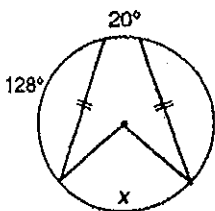
2. $x = \text{---}$



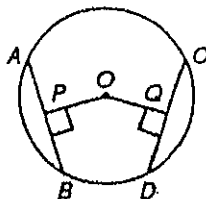
3.* $x = \text{---}$



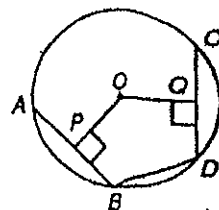
4. $x = \text{---}$



5. $AB = CD$
 $PO = 8 \text{ cm}$
 $OQ = \text{---}$



6. $AB = 6 \text{ cm}$ $OP = 4$
 $CD = 8 \text{ cm}$ $OQ = 3$
 $BD = 6 \text{ cm}$
 What is the perimeter of $OPBDQ$?



EXERCISE SET B

Conjecture 41 is useful if you need to find the unmarked center of a circle.

- Use one of the circular objects you collected in Lesson 6.1 to trace a circle onto a clean sheet of paper. Don't use your compass (because then you'll know where the center is). Construct two chords. Construct the perpendicular bisector of each. Locate the center of the circle. Label it O .
- Use another circular object to trace a large minor arc. Locate by construction a point on the arc equally distant from the arc's endpoints. Label it P .
- Construct a triangle. Construct a circle passing through all three vertices. (The sides of the triangle become chords of the circle.) Why does this seem familiar?
- Draw a circle. Draw two chords of the circle of unequal length. Which is closer to the center of the circle, the larger chord or smaller chord?
- Draw two circles with different length radii. Draw a chord in each circle with the same length. Each chord determines a central angle. Draw the central angles. Which central angle is larger?