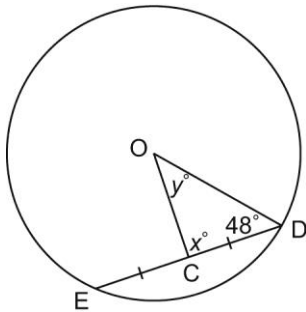


Master 8.18

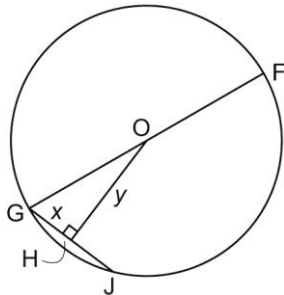
Extra Practice 2

Lesson 8.2 Properties of Chords in a Circle

1. Draw and label a diagram to illustrate the relationship between a chord, its perpendicular bisector, and the centre of a circle.
2. Point O is the centre of the circle.
Determine the values of x° and y° .



3. Point O is the centre of the circle; $OF = 18$ cm; and $GJ = 14$ cm.
Determine the values of x and y to the nearest tenth of a centimetre where necessary.



4. A circle has diameter 70 cm.
A chord in the circle is 50 cm long.
How far is the chord from the centre of the circle?
Give the answer to the nearest tenth of a centimetre.
5. A circle has diameter 22 cm.
Two chords are drawn on opposite sides of the centre of the circle.
One chord is 16 cm long and the other chord is 12 cm long.
 - a) Which chord is closer to the centre of the circle?
 - b) How much closer to the centre is this chord?
Give the answer to the nearest tenth of a centimetre.