

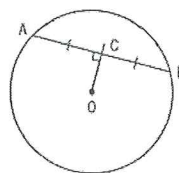
# U5 L4 Wksht Answers

## 8.2 Properties of Chords in a Circle, page 397

3. a)  $d^\circ = 90^\circ$       b)  $e = 5$   
c)  $f = 7$
4. a)  $x^\circ = 50^\circ, y^\circ = 90^\circ$       b)  $x^\circ = 22^\circ, y^\circ = 136^\circ$   
c)  $x^\circ = y^\circ = 35^\circ$
5. a)  $a = b \doteq 9.5$       b)  $a \doteq 5.7, b \doteq 11.5$
6.  $b \doteq 7.5$
7. a)  $r \doteq 2.2$       b)  $r = 6$

8. The distances between the centre and all chords of the same length are equal.
9. Draw two chords and their perpendicular bisectors. The intersection point of the perpendicular bisectors is the centre of the circle.
10. a)  $s \doteq 3.8$       b)  $s \doteq 7.3$
11. 9.6 cm
12. a) Parts i, ii, and iii  
b) i) About 6.5 cm      ii) About 5.4 cm  
iii) 0 cm

13.



14. About 15.3 cm
15. a) About 5.1 cm  
b) The congruent chords are equidistant from the centre of the circle.
17. About 39.0 km
18. About 3.0 m
19. a) About 21.3 cm; about 4.7 cm  
b) Two answers; the water level could be below or above the centre of the bowl