Chapter Self-Test

1. Draw a circle with a radius of 6.5 cm. Draw and label a chord, an arc, and a diameter.

2. State whether each measurement is an area or a circumference.

a) the amount of sod needed to cover the circular green on a golf course

b) the amount of material needed to make a pool cover

c) the length of stone used for the border of a round garden

d) the metal frame around a basketball hoop

3. Explain how to calculate the radius of a circle if you know its diameter.

4. Calculate the circumference of a circle with each measurement.

a) radius 2.5 km

b) radius 26 cm

c) diameter 3.0 cm

d) diameter 21 cm

5. Calculate the area of a circle with each measurement.

a) radius 2 cm

b) diameter 11 cm

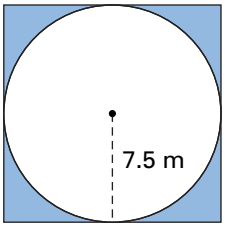
c) diameter 5.7 cm

d) radius 6.2 cm

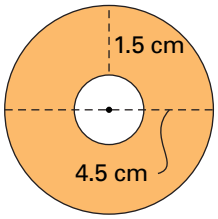
6. a) What is the area of the square?

b) What is the area of the white circle?

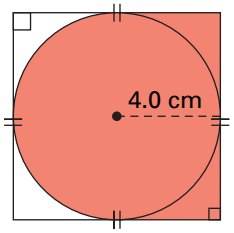
c) What is the area of the blue sections?



7. What is the area of the orange region?

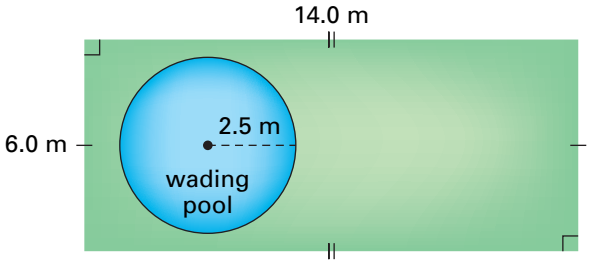


8. What is the area of the red region?



9. a) Determine the area of the park that is not covered by the wading pool.

b) How much fencing is needed to surround the wading pool?



10. Draw a circle with each measurement.

a) area 113 cm^2

b) circumference 17.0 cm

11. The gravel bed for Taylor's pool is a circle with an area of 24.6 m^2. How many metres of fencing are needed to go around the bed?