

## 4. Practical Geometry

### Exercise 4.1

#### 1 A. Question

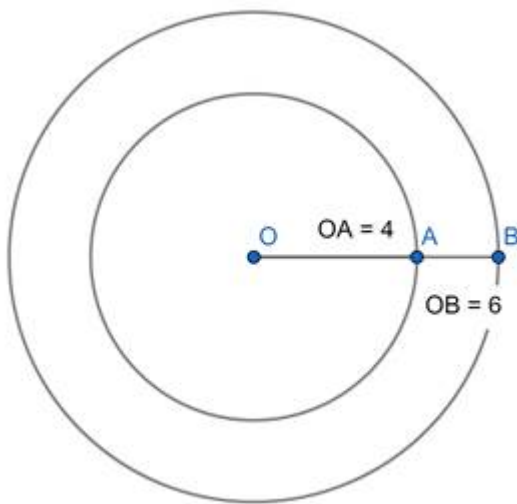
Draw concentric circles for the following measurements of radii. Find out the width of each circular ring.

4 cm and 6 cm.

#### Answer

4cm and 6cmSteps of construction:

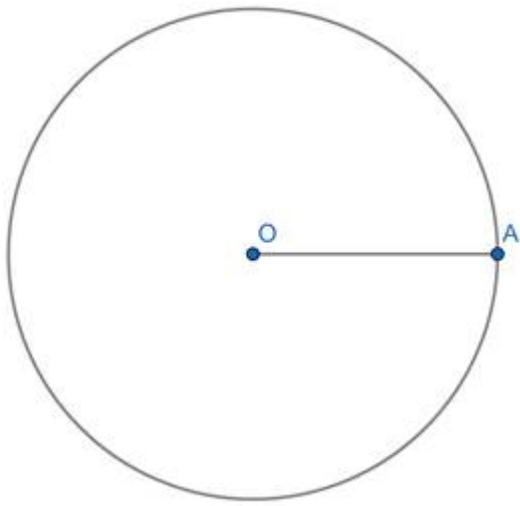
Step 1: Draw a rough image and mark the given measurement.



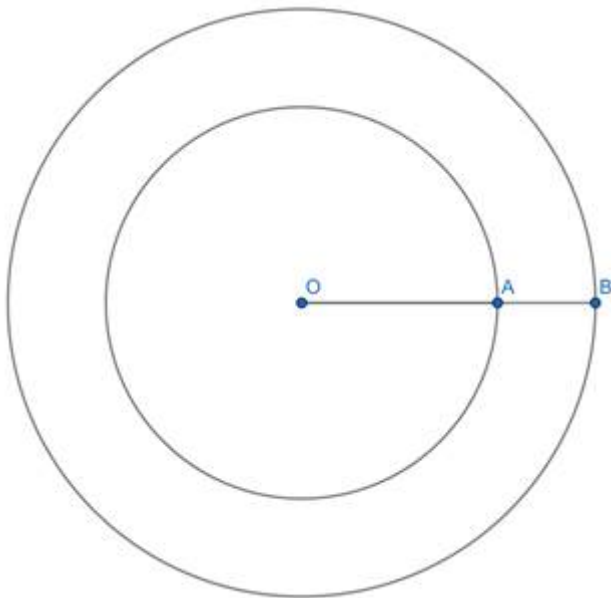
Step 2: Take any point O and mark its as centre.



Step 3: With O as centre, draw a circle of radius  $OA = 4\text{cm}$ .



Step 4: With O as centre, draw a circle of radius  $OB = 6\text{cm}$ .



Thus, the concentric circle  $C_1$  and  $C_2$  are drawn.

Width of the circular ring =  $OB - OA$

$$= 6 - 4$$

$$= 2\text{cm}$$

### 1 B. Question

Draw concentric circles for the following measurements of radii. Find out the width of each circular ring.

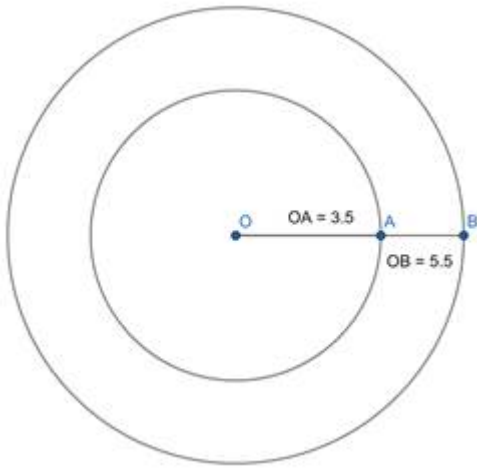
3.5 cm and 5.5 cm.

### Answer

3.5 cm and 5.5 cm

Steps of construction:

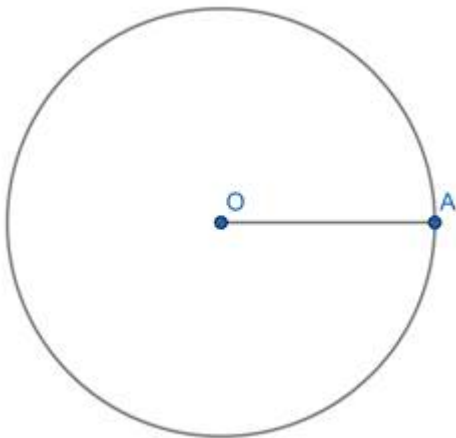
Step 1: Draw a rough image and mark the given measurement.



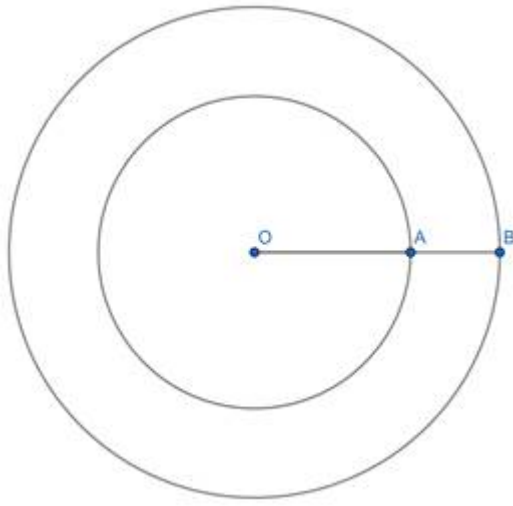
Step 2: Take any point O and mark it's as centre.



Step 3: With O as centre, draw a circle of radius  $OA = 3.5$  cm.



Step 4: With O as centre, draw a circle of radius  $OB = 5.5$  cm.



Thus, the concentric circle C1 and C2 are drawn.

Width of the circular ring =  $OB - OA$

$$= 5.5 - 3.5$$

$$= 2\text{cm}$$

### 1 C. Question

Draw concentric circles for the following measurements of radii. Find out the width of each circular ring.

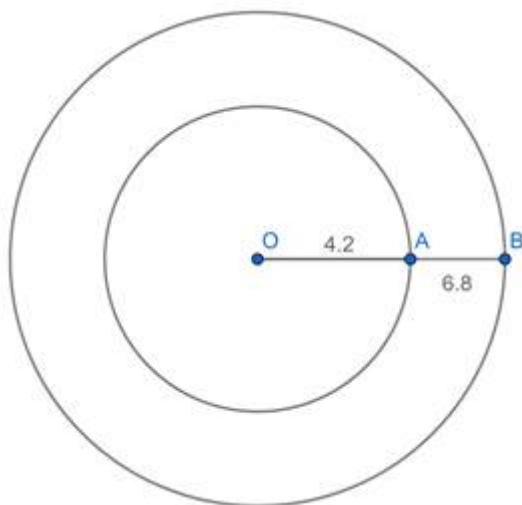
4.2 cm and 6.8 cm.

### Answer

4.2 cm and 6.8 cm

### Steps of construction:

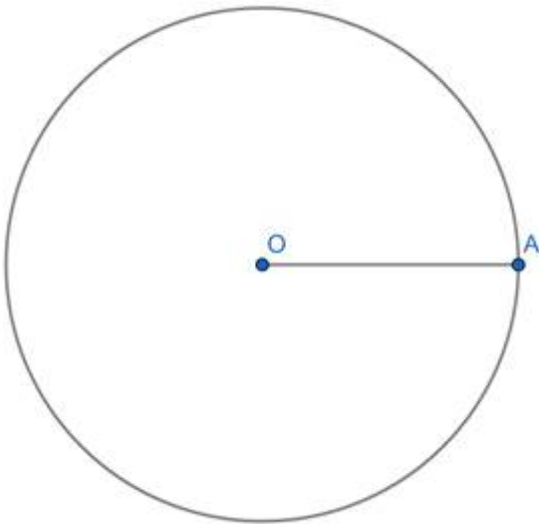
Step 1: Draw a rough image and mark the given measurement.



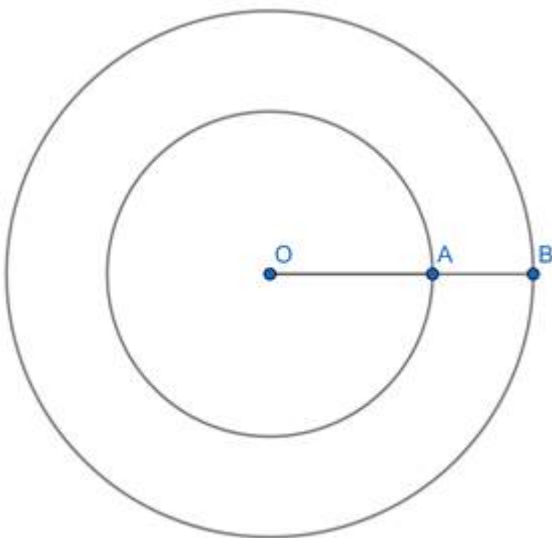
Step 2: Take any point O and mark it's as centre.



Step 3: With O as centre, draw a circle of radius  $OA = 4.2$  cm.



Step 4: With O as centre, draw a circle of radius  $OB = 6.8$  cm.



Thus, the concentric circle C1 and C2 are drawn.

Width of the circular ring =  $OB - OA$

$$= 6.8 - 4.2$$

$$= 2.6 \text{ cm}$$

**1 D. Question**

Draw concentric circles for the following measurements of radii. Find out the width of each circular ring.

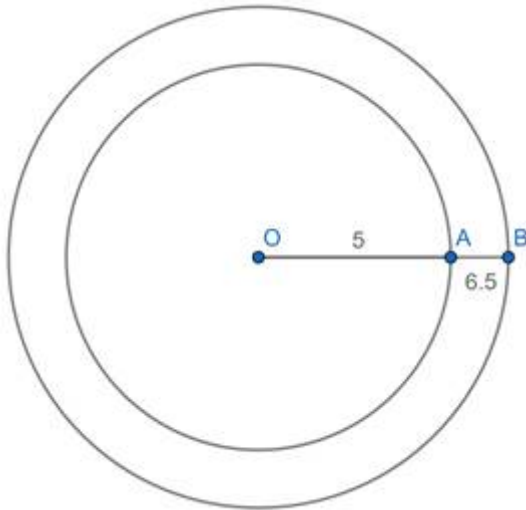
5 cm and 6.5 cm.

**Answer**

5cm and 6.5cm

Steps of construction:

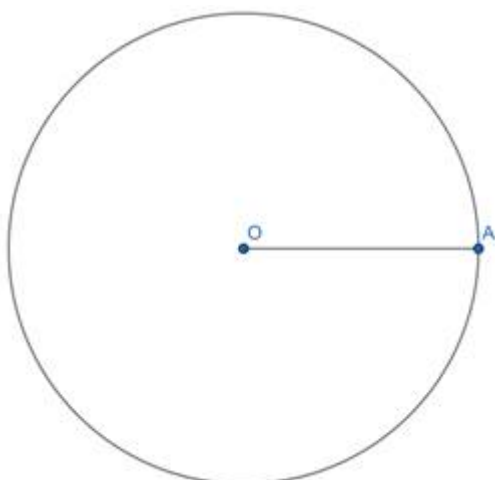
Step 1: Draw a rough image and mark the given measurement.



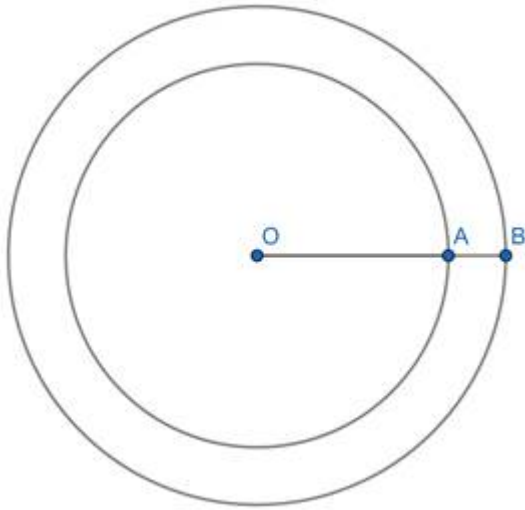
Step 2: Take any point O and mark it's as centre.



Step 3: With O as centre, draw a circle of radius OA = 5cm.



Step 4: With O as centre, draw a circle of radius  $OA = 6.5\text{cm}$ .



Thus, the concentric circle  $C_1$  and  $C_2$  are drawn.

Width of the circular ring =  $OB - OA$

$$= 6.5 - 5$$

$$= 1.5 \text{ cm}$$

### 1 E. Question

Draw concentric circles for the following measurements of radii. Find out the width of each circular ring.

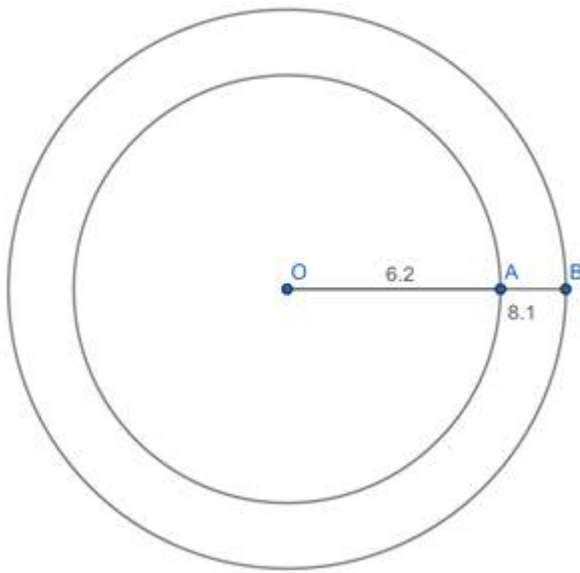
6.2 cm and 8.1 cm.

### Answer

6.2 cm and 8.1 cm

### Steps of construction:

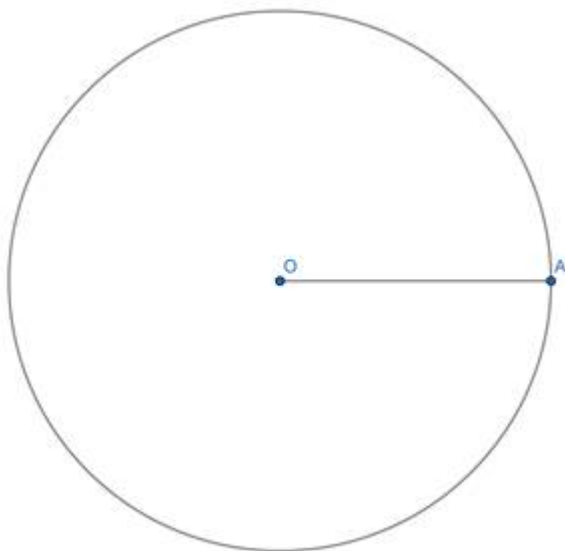
Step 1: Draw a rough image and mark the given measurement.



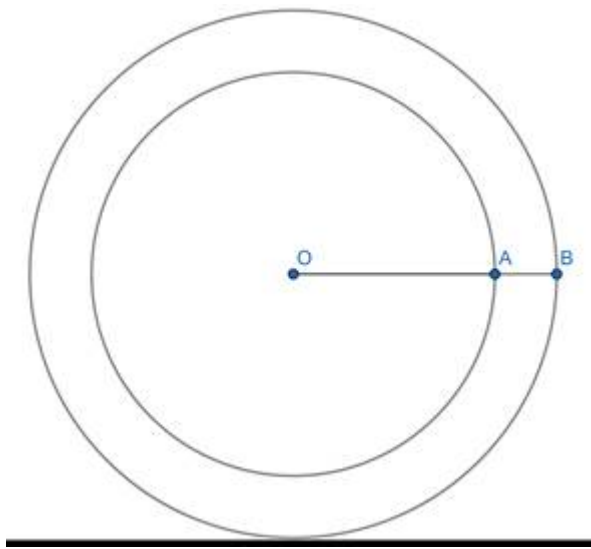
Step 2: Take any point O and mark it's as centre.



Step 3: With O as centre, draw a circle of radius  $OA = 6.2\text{cm}$ .



Step 4: With O as centre, draw a circle of radius  $OA = 8.1\text{cm}$ .



Thus, the concentric circle  $C_1$  and  $C_2$  are drawn.

Width of the circular ring =  $OB - OA$

$$= 8.1 - 6.2$$

$$= 1.9$$

### 1 F. Question

Draw concentric circles for the following measurements of radii. Find out the width of each circular ring.

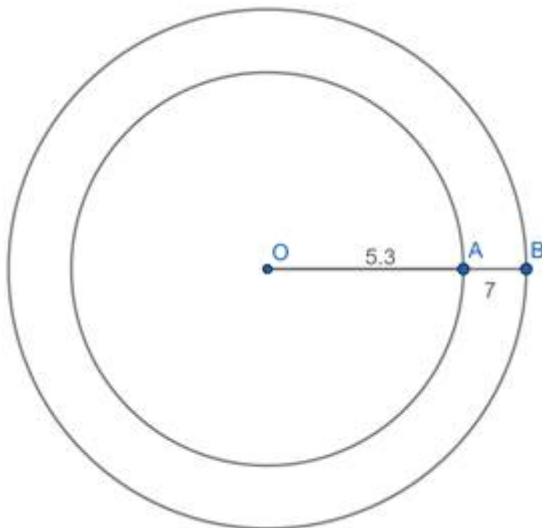
5.3 cm and 7 cm.

### Answer

5.3 cm and 7cm

Steps of construction:

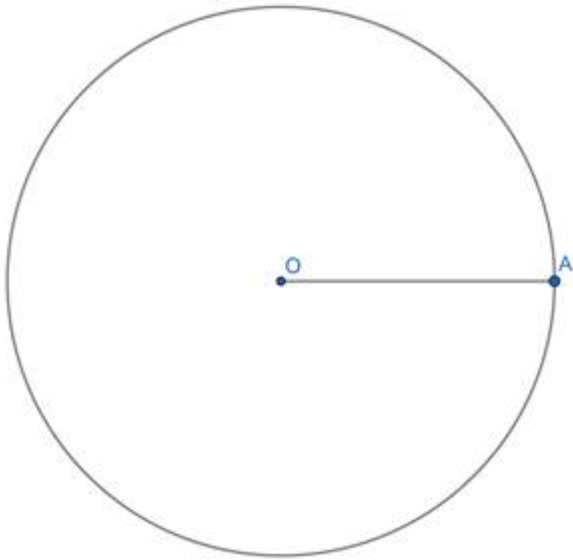
Step 1: Draw a rough image and mark the given measurement.



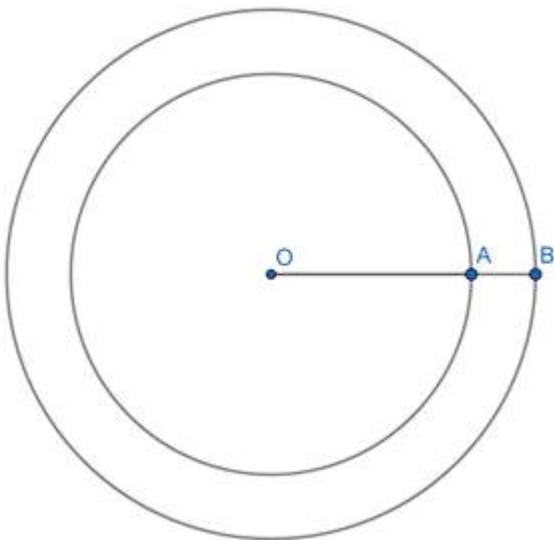
Step 2: Take any point O and mark it's as centre.



Step 3: With O as centre, draw a circle of radius  $OA = 5.3\text{cm}$ .



Step 4: With O as centre, draw a circle of radius  $OB = 7\text{cm}$ .



Thus, the concentric circle  $C_1$  and  $C_2$  are drawn.

Width of the circular ring =  $OB - OA$

$$= 7 - 5.3$$

$$= 1.7 \text{ cm}$$