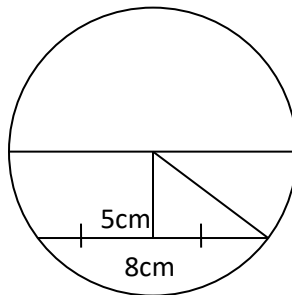
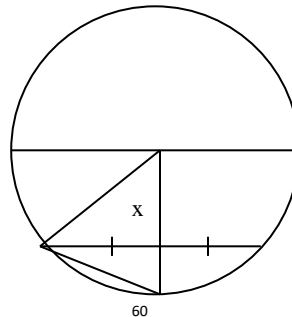
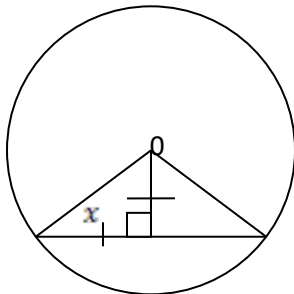


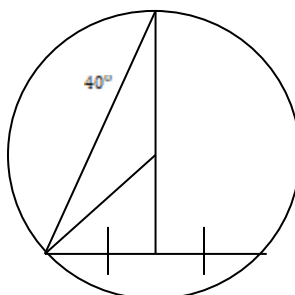
- (1) Write down the theorem related to the centre of a circle and midpoint of a chord.
- (2) If length of the chord is 8cm and length of perpendicular drawn to the chord is 5 cm, find the the radius of following circle .



- (3) Using the information in each figure, find the magnitude of angles denoted by x .



- (4) find the magnitude of the angle represented by x , if length of the chord is 12cm find the radius of the circle



$$20^\circ$$

$$x$$

(5)

AB and CD are two chords of a circle with centre O which are not parallel to each other. The midpoints of AB and CD are Q and R respectively. The chords AB and CD produced meet at P. Show that $\angle QOR$ and $\angle QPR$ are supplementary angles of the quadrilateral PQOR.

(6)

AB and CD are two chords of a circle with centre O which are drawn parallel to its diameter. If the radius of the circle is 20 cm and length of AB and CD are 32 cm and 24 cm respectively, find the distance between the two chords.

(7)

Using the pair of compasses and the ruler draw the following angles and construct their bisectors.

- I. 60°
- II. 90°
- III. 120°

(8)

- I. Construct the triangle such that $AB=8\text{cm}$, $\angle B = 90^\circ$ and $BC=7\text{cm}$
- II. Measure and write down the length of side AC.
- III. Write down the relationship between AB, BC and AC
- IV. Find a value for $\sqrt{113}$ using the construction.

