

Exercise 2015-8 EL-00003(1)

- (1) (a) Construct $PQ = 7 \text{ cm}$.
(b) Construct the perpendicular bisector of PQ .
- (2) (a) Draw line $AB = 65 \text{ mm}$.
(b) Construct $\hat{CAB} = 55^\circ$.
(c) Draw $AC = 65 \text{ mm}$.
(d) Construct $\hat{ABD} = 125^\circ$.
(e) Draw $BD = 6,5 \text{ cm}$.
(f) Join CD and measure the unknown sides and angles.
(g) Which type of quadrilateral is $ABDC$?
- (3) (a) Construct $\triangle KLM$ with $\hat{K} = 90^\circ$, $KL = 60 \text{ mm}$ and $KM = 80 \text{ mm}$.
(b) Bisect $\hat{M}$.
(c) Measure the length of LM and calculate LM^2 .
(d) Calculate: $KL^2 + KM^2$
(e) What do you notice about your answers in (c) and (d)?
- (4) Construct three concentric circles with radii: 3 cm , 5 cm and 75 mm .
- (5) (a) Construct the diagram below according to the given dimensions:

$$XY = VW = 10 \text{ cm}$$

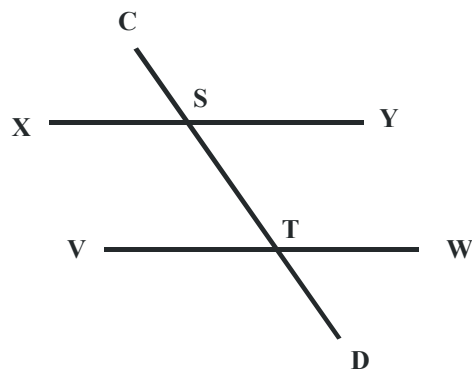
$$WT = 45 \text{ mm}$$

$$\hat{WTC} = 120^\circ$$

$$ST = SY = 50 \text{ mm}$$

$$\hat{TSY} = 60^\circ$$

$$CS = TD = 30 \text{ mm}$$



- (b) What do you notice regarding XY and VW ? Motivate.