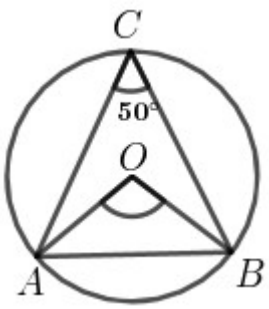
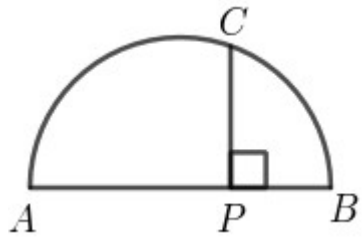
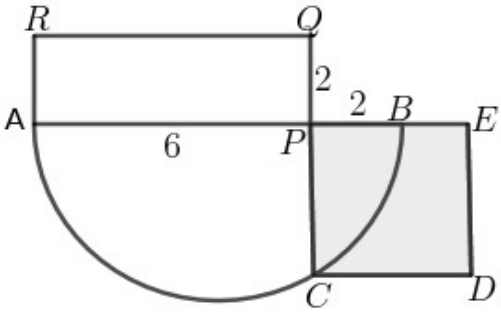
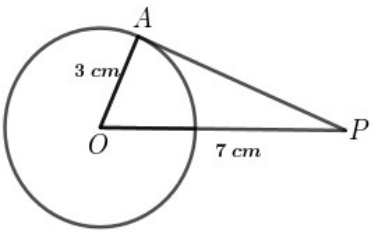
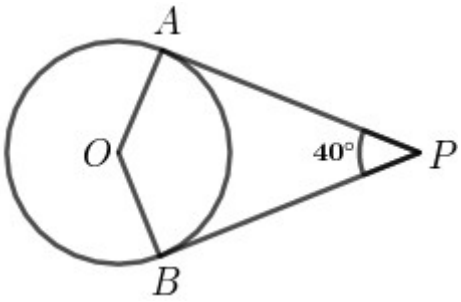
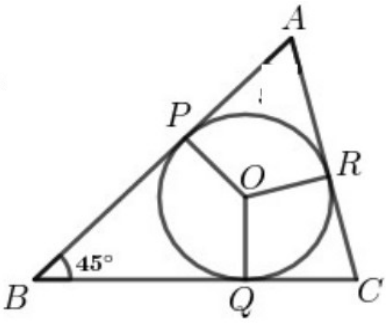
WANDOOR GANITHAM – S.S.L.C STUDY MATERIAL 2021

FOCUS AREA - ALL CONSTRUCTIONS

1	*In the figure O is the centre of the circumcircle of triangle ABC .* $< C = 50^0$ **a)** *What is the measure of* $< AOB$? **b)** *Draw a triangle of circumradius* 3 *cm and two of the angles* 50^0 *and* 60^0 ? 
2	*Draw a triangle of circumradius* 5 *cm and two of the angles* 70^0 *and* 80^0 .
3	*Draw a triangle of circumradius 4 cm and two of the angles* 45^0 *and* 65^0 .
4	*Draw a triangle of circumradius 3.5 cm and two of the angles* 55^0 *and* 75^0 .
5	*In the figure AB is the diameter of the semicircle .* *P is a point on AB . The perpendicular drawn through P to AB meets the semicircle at C .* **a)** *If PA* = 5 *cm and PB* = 3 *cm ,what is the length of PC* ? **b)** *Draw a square of area* 15 *square centimetres* ? 
6	*In the figure PA = 6 cm , PB = PQ = 2 cm* **a)** *What is the area of the square PCDE* ? **b)** *Draw a square of area* 12 *square centimetres* ? 
7	*Draw a rectangle of width* 6 *cm and height* 3 *cm . Draw a square of the same area .*
8	*Draw a rectangle of width* 7 *cm and height* 2 *cm . Draw a square of the same area .*
9	*Draw a rectangle of width* 5 *cm and height* 4 *cm . Draw a square of the same area .*

SARATH A S , GHS ANCHACHAVADI , MALAPPURM

10	***Draw a circle of radius 4 cm and mark a point on it . Draw a tangent through that point***
11	***In the figure O is the centre of the circle .*** ***AP is a tangent .*** **a)** ***What is the measure of < OAP ?*** **b)** ***Draw this figure in correct measurements .*** 
12	***Draw a circle of radius 3 cm and mark a point 6 cm away from its centre. Draw the tangents to the circle from this point . Measure the length of the tangents .***
13	***Draw a circle of radius 4 cm and mark a point 7 cm away from its centre. Draw the tangents to the circle from this point .Measure the length of the tangents .***
14	***Draw a circle of radius 3.5 cm and mark a point 8 cm away from its centre. Draw the tangents to the circle from this point .Measure the length of the tangents .***
15	***In the figure ,O is the centre of the circle and the tangents through the points A and B . intersect at P . < APB = 40⁰*** **a)** ***What is the measure of < AOB ?*** **b)** ***Draw a circle of radius 2 cm . Draw a triangle of angles 40º ,60º , 80º with all its sides touching this circle .*** 
16	***In the figure O is the centre of the incircle . The circle touches the sides of the triangle at the points P , Q and R*** ***< ABC = 45⁰*** **a)** ***What is the measure of < POQ ?*** **b)** ***Draw a circle of radius 3 cm . Draw a triangle of angles 45º , 55º , 80º with all its sides touching this circle .*** 

17	***Draw a circle of radius 2.5 cm . Draw a triangle of angles 50º , 60º , 70º with all its sides touching this circle .***
18	***Draw a circle of radius 3 cm . Draw a triangle of angles 40 º , 70º , 70º with all its sides touching this circle .***
19	***Draw a circle of radius 2.5 cm . Draw a triangle of angles 50 º , 55º , 75º with all its sides touching this circle .***
20	***Draw a circle of radius 2 cm . Draw an equilateral triangle triangle with all its sides touching this circle .***