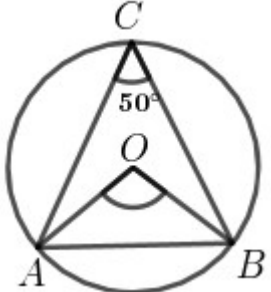
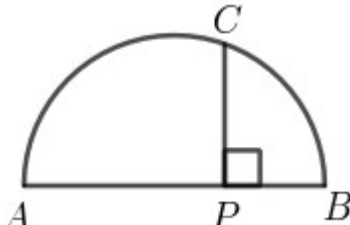
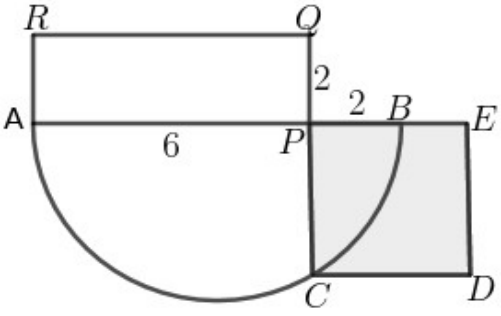
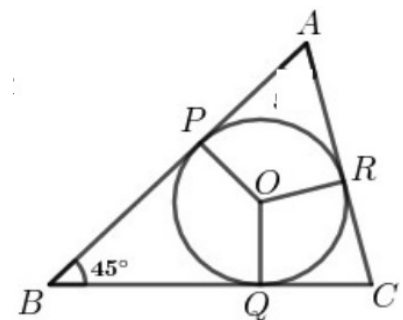
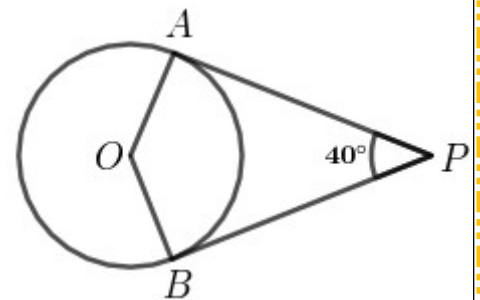
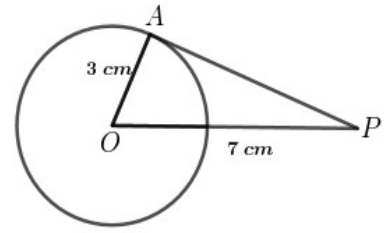


WANDOOR GANITHAM – S.S.L.C STUDY MATERIAL 2022

FOCUS AREA - ALL CONSTRUCTIONS

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

10	Draw a circle of radius 4 cm and mark a point on it . Draw a tangent through that point
11	<p>In the figure O is the centre of the circle . AP is a tangent .</p> <p>a) What is the measure of $\angle OAP$?</p> <p>b) Draw this figure in correct measurements .</p>
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	<p>In the figure ,O is the centre of the circle and the tangents through the points A and B . intersect at P . $\angle APB = 40^\circ$</p> <p>a) What is the measure of $\angle AOB$?</p> <p>b) Draw a circle of radius 2 cm . Draw a triangle of angles 40° , 60° , 80° with all its sides touching this circle .</p>
16	<p>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 :</p> <p>$\angle ABC = 45^\circ$</p> <p>a) What is the measure of $\angle POQ$?</p> <p>b) Draw a circle of radius 3 cm . Draw a triangle of angles 45° , 55° , 80° with all its sides touching this circle .</p>



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