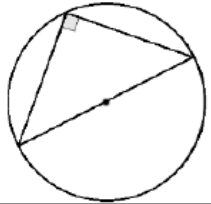
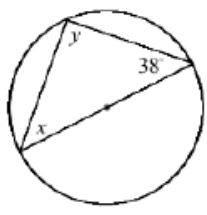
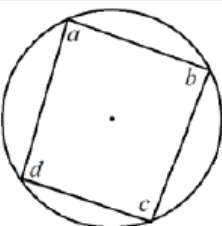
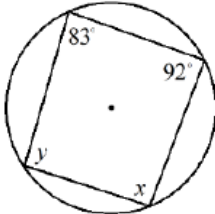
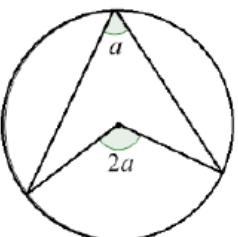
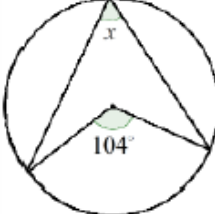
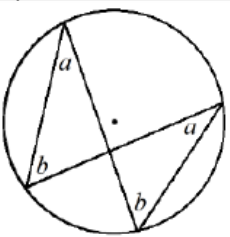
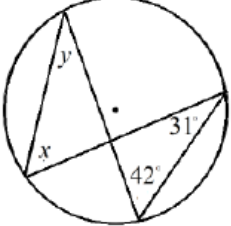
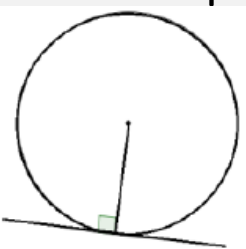
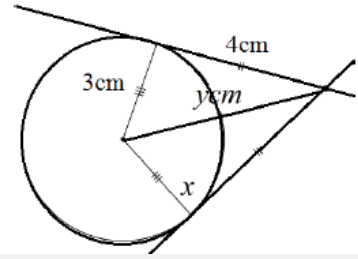
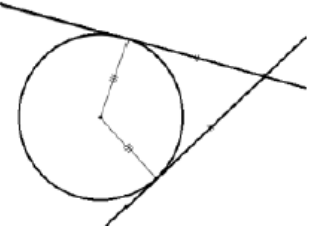
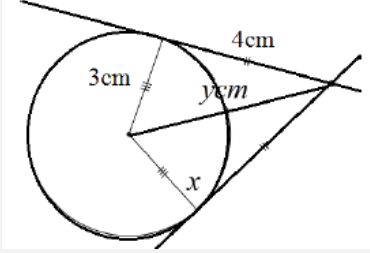
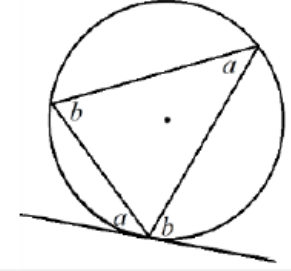
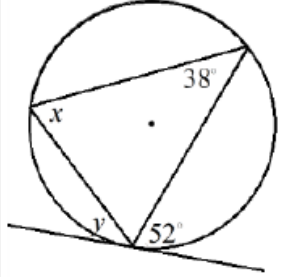


Topic: Circle Theorems

Topic/Skill	Definition/Tips	Example
Circle Theorem 1	<p>Angles in a semi-circle have a right angle at the circumference.</p> 	 <p> $y = 90^\circ$ $x = 180 - 90 - 38 = 52^\circ$ </p>
Circle Theorem 2	<p>Opposite angles in a cyclic quadrilateral add up to 180°.</p>  <p> $a + c = 180^\circ$ $b + d = 180^\circ$ </p>	 <p> $x = 180 - 83 = 97^\circ$ $y = 180 - 92 = 88^\circ$ </p>
Circle Theorem 3	<p>The angle at the centre is twice the angle at the circumference.</p> 	 <p> $x = 104 \div 2 = 52^\circ$ </p>
Circle Theorem 4	<p>Angles in the same segment are equal.</p> 	 <p> $x = 42^\circ$ $y = 31^\circ$ </p>
Circle Theorem 5	<p>A tangent is perpendicular to the radius at the point of contact.</p> 	 <p> $y = 5\text{cm}$ (Pythagoras' Theorem) </p>

<p>Circle Theorem 6</p>	<p>Tangents from an external point at equal in length.</p> 	 <p>$x = 90^\circ$</p>
<p>Circle Theorem 7</p>	<p>Alternate Segment Theorem</p> 	 <p>$x = 52^\circ$ $y = 38^\circ$</p>