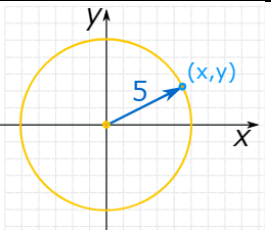
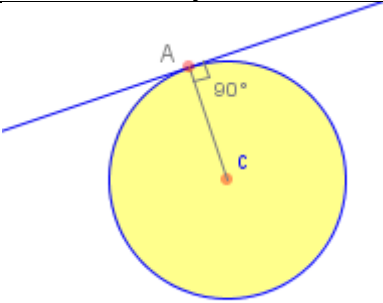
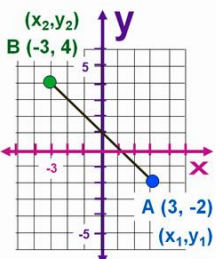
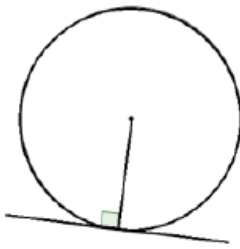
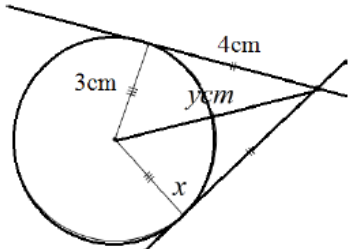


Topic/Skill	Definition/Tips	Example
1. Equation of a Circle	<p>The equation of a circle, centre (0,0), radius r, is:</p> $x^2 + y^2 = r^2$	 $x^2 + y^2 = 25$
2. Tangent	<p>A straight line that touches a circle at exactly one point, never entering the circle's interior.</p> <p>A radius is perpendicular to a tangent at the point of contact.</p>	
3. Gradient	<p>Gradient is another word for slope.</p> $G = \frac{\text{Rise}}{\text{Run}} = \frac{\text{Change in } y}{\text{Change in } x} = \frac{y_2 - y_1}{x_2 - x_1}$	 <p>We need to find the GRADIENT between A at (3,-2) and B at (-3,4)</p> $m = \frac{y_2 - y_1}{x_2 - x_1}$ $m = \frac{4 - (-2)}{-3 - 3}$ $m = 6 / -6 = -1 \checkmark$
4. 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>