
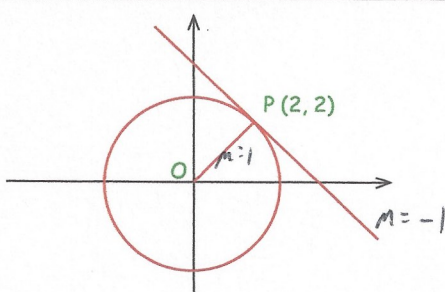
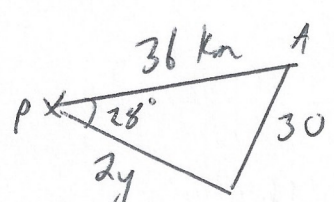


<p>28th August</p>	 <p>Corbettmaths</p>
<p>Simplify fully</p> $\frac{3\cos(45^\circ) - \sin(45^\circ)}{\tan(30^\circ)}$	$\frac{\frac{3\sqrt{2}}{2} - \frac{\sqrt{2}}{2}}{\frac{\sqrt{3}}{3}} = \frac{\sqrt{2}}{\frac{\sqrt{3}}{3}} = \frac{3\sqrt{2}}{\sqrt{3}} = \sqrt{6}$
	<p>Show is the circle $x^2 + y^2 = 8$</p> <p>Find the equation of the tangent</p> $y = -x + 4$
<p>In year 7 there are 20% more girls than boys.</p> <p>$\frac{3}{20}$ of the girls are left handed</p> <p>$\frac{1}{4}$ of the boys are left handed</p>	<p>43 of the students in year 7 are left handed.</p> <p>Find how many students are in year 7</p> <p>220</p> <p>100 boys & 120 girls</p>
<p>Two ships, A and B, leave a port at midday.</p> <p>A travels on a bearing of 085° at a speed of 18km/h.</p> <p>B travels on a bearing of 113° at a speed of y km/h.</p> <p>At 14:00 the distance between A and B is 30km.</p> <p>Boat B was travelling at a slower speed than boat A</p> <p>Work out y, the speed of boat B.</p>	 $30^2 = (2y)^2 + 36^2 - (2 \times 2y \times 36) \cos 28$ $900 = 4y^2 + 1296 - 144y (\cos 28)$ $0 = 4y^2 - 127.1444y + 396$ <p>Using quadratic formula</p> $y = 28.286 \dots$ <p>$y = 3.5$</p>

3.5 km/h