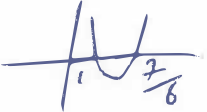
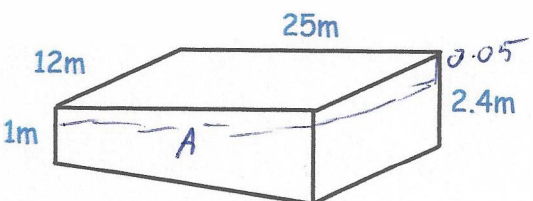


9th April	
<p>Prove that $(n + 1)^2 + (n + 3)^2 - (n + 5)^2$ is equivalent to $(n + 3)(n - 5)$</p> <p>$(n+1)(n+1) + (n+3)(n+3) - (n+5)(n+5)$ $n^2 + 2n + 1 + n^2 + 6n + 9 - (n^2 + 10n + 25)$</p>	<p style="text-align: right;">Corbettm0ths</p> <p style="text-align: center;">$n^2 - 2n - 15$ $(n-5)(n+3)$ QED.</p>
<p>A circle has equation</p> $x^2 + y^2 = \frac{1}{9}$ <p>Write down the length of its radius</p>	<p style="text-align: center;">$r = \frac{1}{3}$</p>
<p>Solve $6x^2 - 13x + 7 < 0$</p> <p>$(6x - 7)(x - 1)$</p> 	<p style="text-align: center;">$1 < x < \frac{7}{6}$</p>
<p>Shown below is a swimming pool</p>  <p>The swimming pool is full of water. Kevaughan begins to empty the swimming pool at a constant rate. The level of the water goes down by 5cm in the first 20 minutes.</p>	<p>Work out how long it takes in total to empty the swimming pool.</p> <p>Area of A: $\frac{1}{2}(1 + 2.4) \times 25$ $= 42.5$</p> <p>Volume = 510 m^3</p> <p>15 m^3 in 20 minutes 0.75 m^3 in 1 minute</p> <p>$510 \div 0.75 = 680$ minutes</p>