
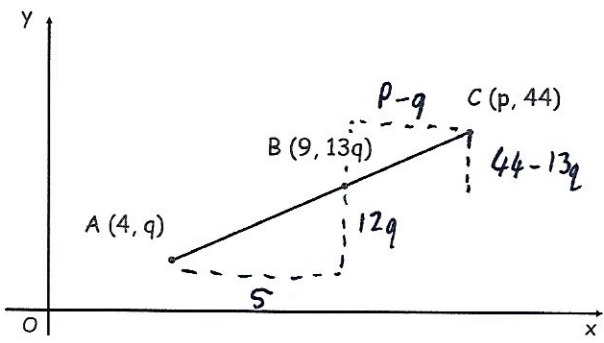
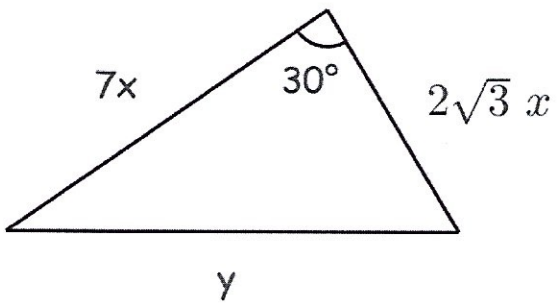


<p><b>29th February</b></p>		 Corbettmaths
<p>ABC is a straight line.  <math>AB : BC = 4 : 3</math></p> 	<p>Find the value of p</p> $3 \times 5 = 4(p - 9)$ $15 = 4p - 36$ $4p = 51$ $p = 12.75$	
	<p>Find the value of q</p> $4(44 - 13q) = 3(12q)$ $176 - 52q = 36q$ $176 = 88q$ $q = 2$	
<p>Given that  <math>(ax + 1)(x - 3)(x + b) \equiv 2x^3 - 3x^2 - 8x - 3</math></p> <p>Find the values of a and b</p> $a = 2$ $b = 1$	$ax \times x \times x = 2x^3$ $\therefore a = 2$ $1 \times (-3) \times b = -3$ $b = 1$	
	$\frac{\sqrt{3}}{2}$ $\downarrow$ $y = \sqrt{19} x$	
<p>Express y in terms of x</p> $y^2 = (7x)^2 + (2\sqrt{3}x)^2 - 2 \times (7x) \times (2\sqrt{3}x) \cos 30$ $y^2 = 49x^2 + 12x^2 - 42x^2$ $y^2 = 19x^2$		