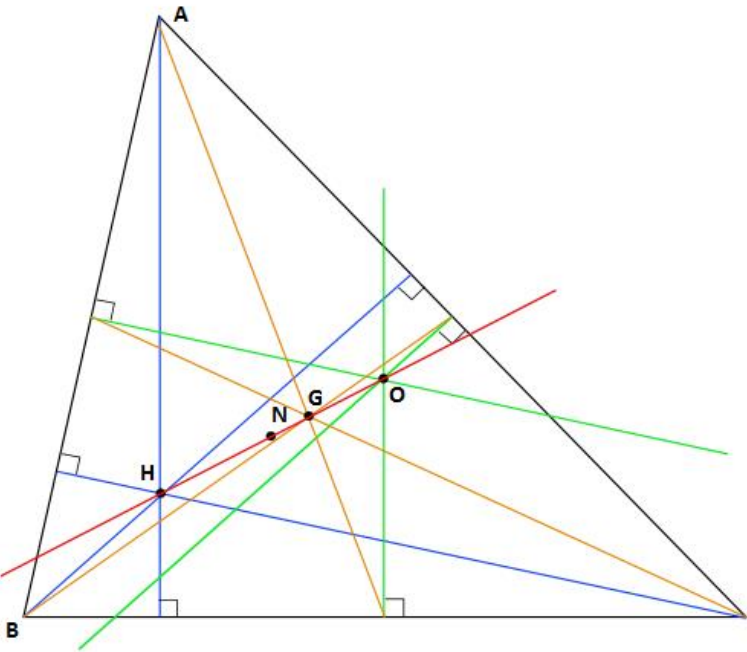
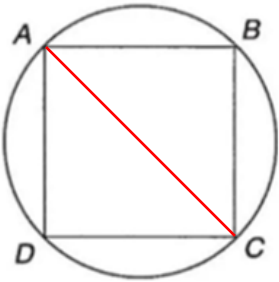


Q6	Model Solution – 25 Marks	Marking Notes
(a)	 <p>Blue lines are altitudes, orange medians, green perpendicular bisectors, and the red line is the Euler line</p>	<p>MS (0, 5, 8, 12, 15)</p> <p>LPC: One correct</p> <p>MPC: Two correct</p> <p>HPC: Three correct but not joined</p>
(b)	 $ ac ^2 = 3^2 + 3^2$ $ ac ^2 = 9 + 9$ $ ac ^2 = 18$ $ ac  = 3\sqrt{2} = \text{diameter}$ $\Rightarrow \text{radius} = \frac{3\sqrt{2}}{2}$ $l = 2\pi r$ $l = 2\pi \frac{3\sqrt{2}}{2}$ $l = \sqrt{18}\pi / 3\sqrt{2}\pi / 13.2286 \dots$	<p>MS (0, 4, 8, 10)</p> <p>LPC Any use of Pythagoras</p> <p>HPC Correct diameter and use of circumference formula</p> <p>**9 marks for correct answer with no units**</p>