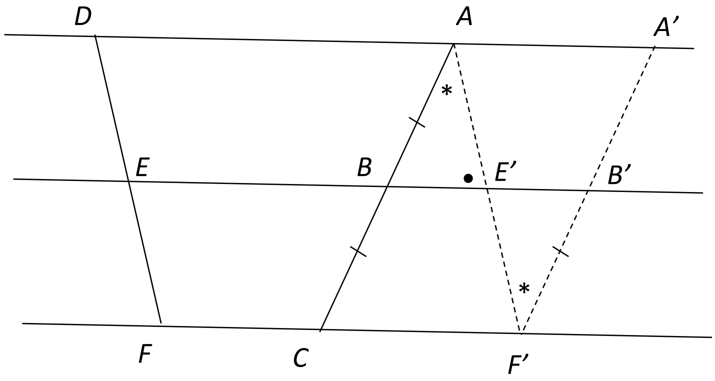
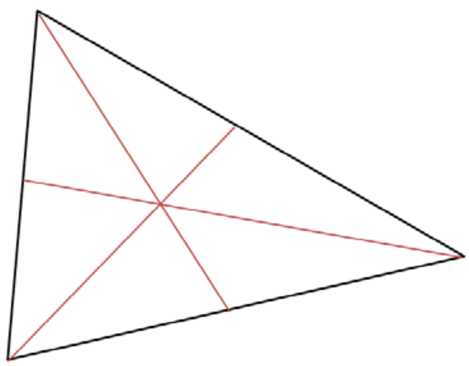
(a)	Diagram:  Given: $AD \parallel BE \parallel CF$ and $\|AB\| = \|BC\|$ To prove: $\|DE\| = \|EF\|$ Construction: Draw $AE' \parallel DE$, cutting EB at E' and CF at F' Draw $F'B' \parallel AB$, cutting EB at B', as in the diagram Proof: $\|B'F'\| = \|BC\|$ (opposite sides in a parallelogram) $= \|AB\|$ (by assumption) $\|\angle BAE'\| = \|\angle E'F'B'\|$ (alternate angles) $\|\angle AE'B\| = \|\angle F'E'B'\|$ (vertically opposite angles) $\therefore \Delta ABE' \equiv \Delta F'B'E'$ (ASA) $\therefore \|AE'\| = \|F'E'\|$ But $\|AE'\| = \|DE\|$ and $\|F'E'\| = \|FE\|$ (opposite sides in a parallelogram) $\therefore \|DE\| = \|EF\|$	**Scale 15D (0, 4, 7, 11, 15)** *Low Partial Credit* Relevant diagram drawn *Mid Partial Credit* Construction clearly indicated *High Partial Credit* Proof missing one relevant step
(b) (i) and (ii)		**Scale 15D (0, 4, 7, 11, 15)** *Low Partial Credit* One side bisected *Mid Partial Credit* One median drawn *High Partial Credit* Accurate centroid drawn