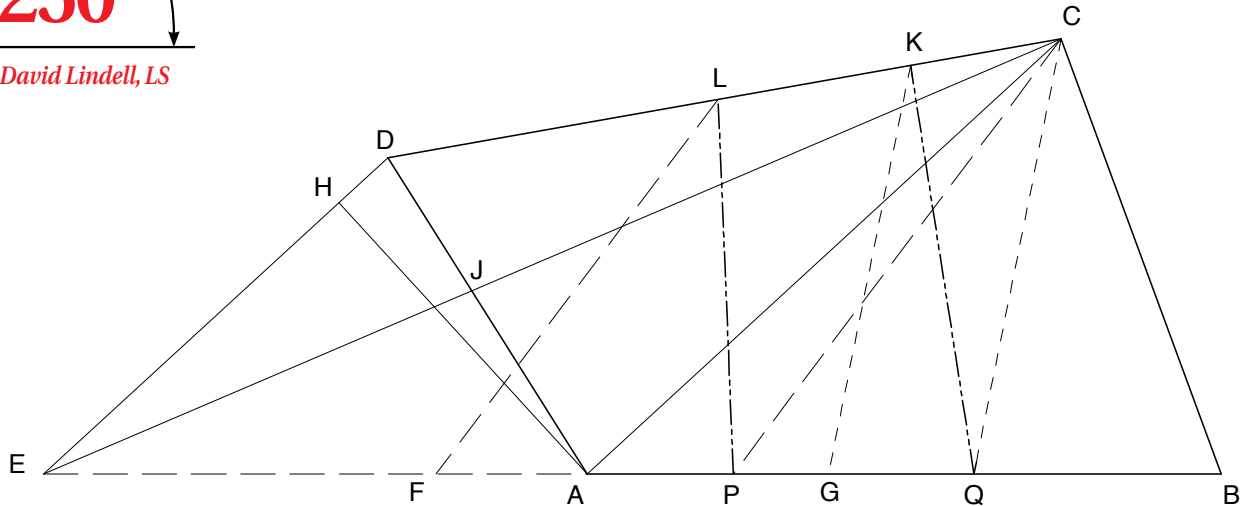


Solution
250

by David Lindell, LS



Reduce the quadrilateral to an equivalent triangle:

Draw CA. Draw DE parallel with CA through D to its intersection with AB prolonged.

Draw CE. Triangle CEB is equivalent in area to quadrilateral ABCD. Triangle EDC is equal in area to triangle EDA (both have base ED and height AH). Adding triangle EDA and subtracting triangle EDC doesn't change the area because triangle EDJ is added and then subtracted.

Divide EB in three equal parts at points F and G. Draw CQ. Draw GK parallel with CQ.

Draw CP. Draw FL parallel with CP.

Draw PL and QK, the required dividing lines.