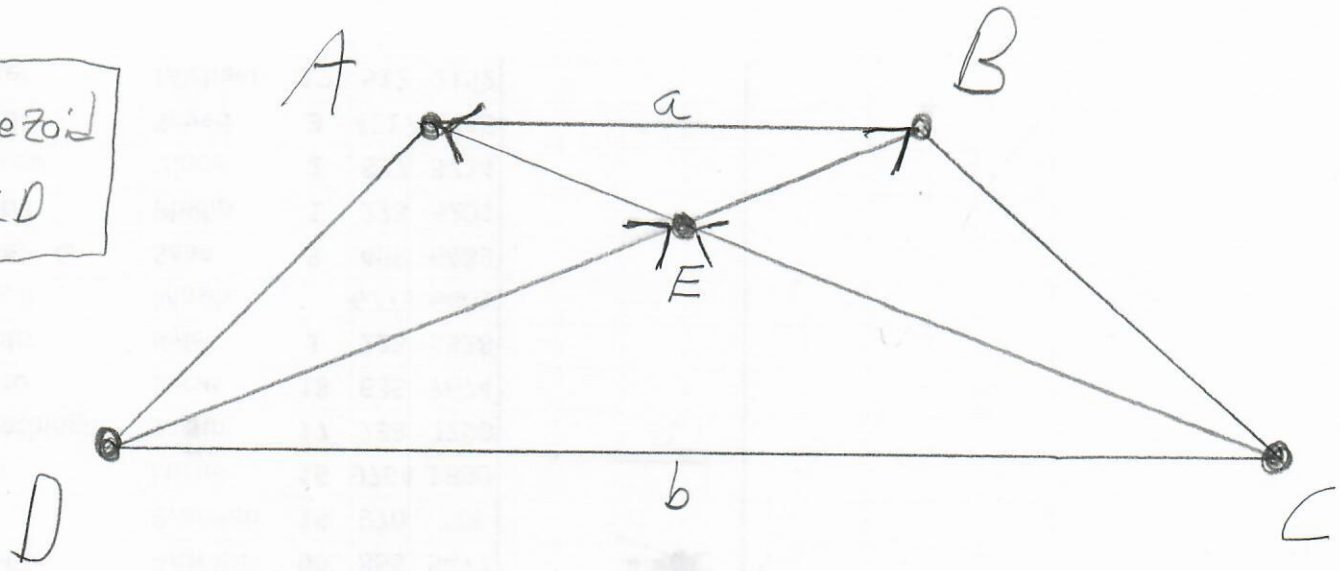


Trapezoid
ABCD



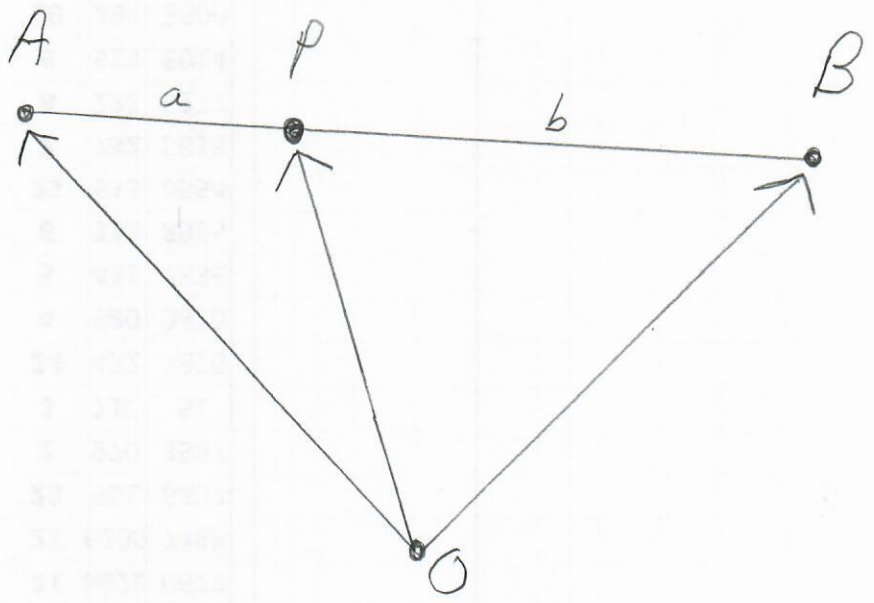
$$\vec{DE} = \frac{b}{a+b} \vec{DB}$$

$$\vec{EB} = \frac{a}{a+b} \vec{DB}$$

$$\vec{CE} = \frac{b}{a+b} \vec{CA}$$

$$\vec{EA} = \frac{a}{a+b} \vec{CA}$$

Division of a
Line Segment



$$\vec{OP} = \frac{b}{a+b} \vec{OA} + \frac{a}{a+b} \vec{OB}$$