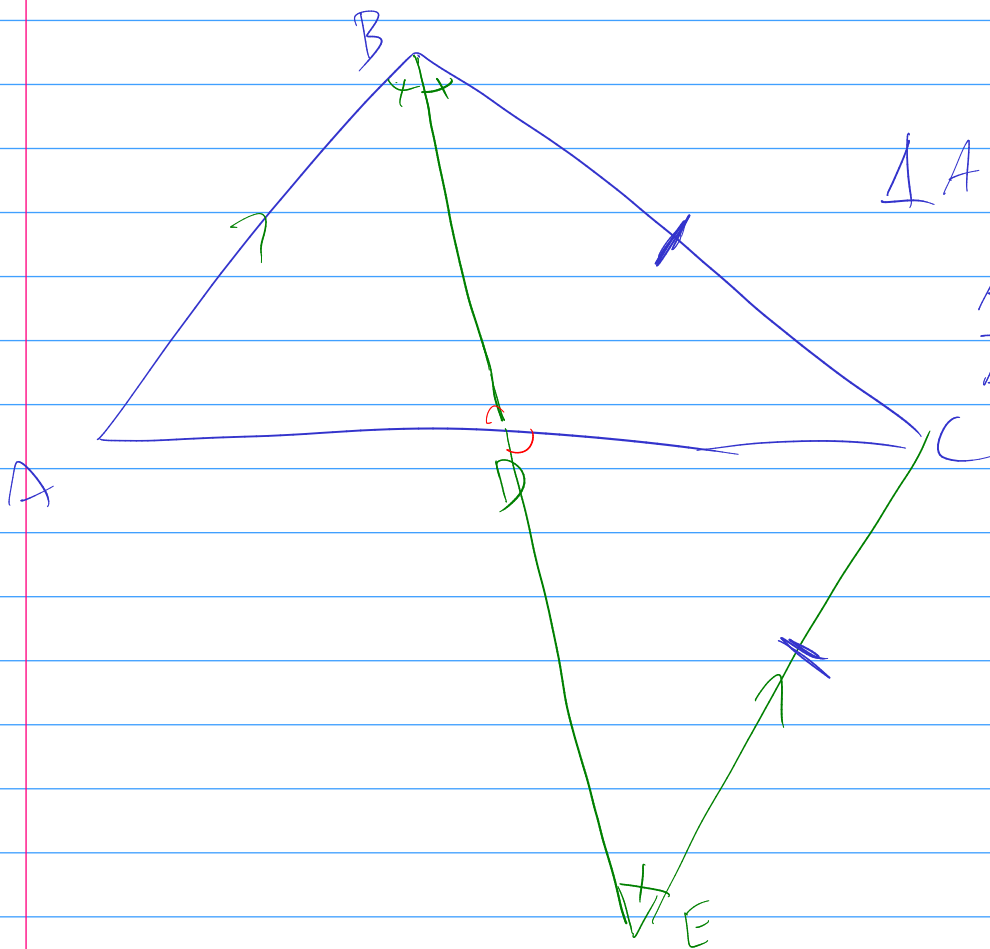


Triangle Centers



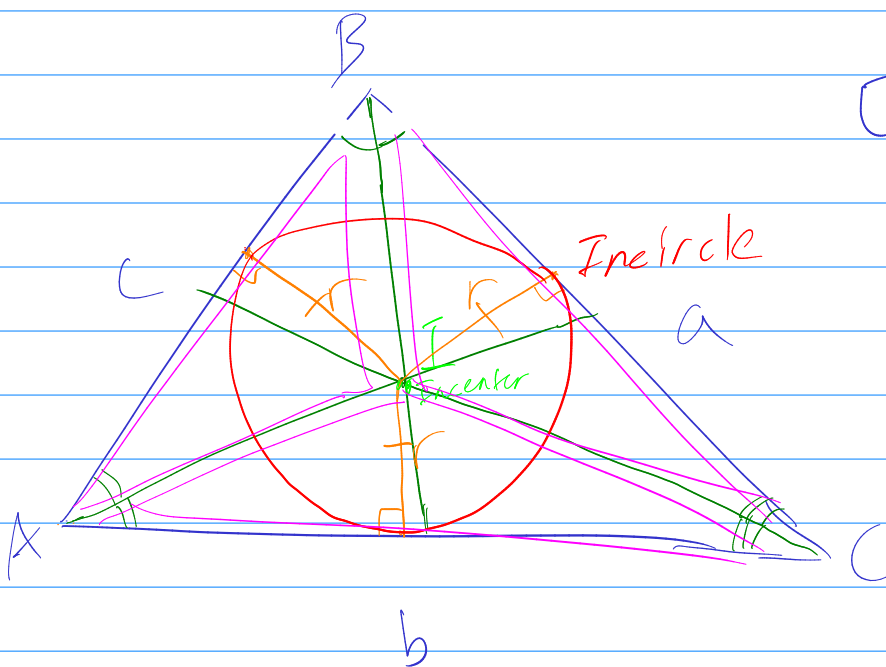
$$\triangle ABD \sim \triangle CED$$

$$\frac{AD}{AB} = \frac{CD}{CE} = \frac{CD}{BC}$$

$$\frac{AD}{AB} = \frac{CD}{BC}$$

$$AD = AC \cdot \frac{AB}{AB+BC}$$

$$CD = AC \cdot \frac{BC}{AB+BC}$$



$$[ABC] = b \cdot \frac{r}{2} + \frac{a \cdot r}{2} + \frac{c \cdot r}{2}$$

$$= \frac{a+b+c}{2} \cdot r$$

$$\approx \frac{s}{2}$$

