



Perpendicular Bisector...

- ❖ of AB through E: $x = u$
- ❖ of BC through F: $y = \frac{u-v}{w}x + \frac{v^2 - u^2 + w^2}{w}$
- ❖ of AC through G: $y = -\frac{v}{w}x + \frac{v^2 + w^2}{w}$
- ❖ Circumcentre: $\left(u, \frac{v^2 - uv + w^2}{w} \right)$

Medians:

- ❖ AF: $y = \frac{w}{u+v}x$
- ❖ BG: $y = \frac{w}{v-2u}x + \frac{2uw}{2u-v}$ or, a more convenient form: $y = \frac{w}{v-2u}x - \frac{2uw}{v-2u}$
- ❖ CE: $y = \frac{2w}{2v-u}x + \frac{2uw}{u-2v}$ or $y = \frac{2w}{2v-u}x - \frac{2uw}{2v-u}$ (Why is the 2nd form better?)
- ❖ Centroid: $\left(\frac{2u+2v}{3}, \frac{2w}{3} \right)$