

### SKETCH AND INVESTIGATE

**Q1** The third median intersects the other two at their point of intersection. The three medians are concurrent.

**Q2** Students could record either one of these calculations.

$$\frac{BG}{GF} = 2.000 \quad \frac{GF}{BG} = 0.500$$

**Q3** The centroid divides each median into two parts. One part is twice the length of the other.

**Q4** The slope of the line is  $1/2$  (or  $2$ , depending on which way students build their tables). This represents the ratio between the lengths of the segments the centroid creates on a median.

### EXPLORE MORE

15. For tips on making and using custom tools, see the appropriate sections in the help system. (Choose **Reference Center** from the Help menu, and then look up the Custom Tools link in the index.) This custom tool will be especially useful in the activity The Euler Segment. A sample **Centroid** tool is included in **Medians.gsp**.