

## Math 130 Worksheet 4: Pappus theorem by experiment

1. Draw two lines,  $\ell_1$  and  $\ell_2$
2. Draw three points on  $\ell_1$ , label them  $A, C, E$  in any order
3. Draw three points on  $\ell_2$ , label them  $F, B, D$  in any order
4. Draw lines  $AB, BC, CD, DE, EF$ , and  $FA$
5. Circle the points of intersection:  $AB \cap DE$ ,  $EF \cap BC$ , and  $FA \cap CD$ . (if these don't fit on your page, move your points to somewhere else on the lines so you can finish the exercise)
6. What do you notice about the points of intersection?