

Definitions

Dilation

$k > 1$ — Enlargement 

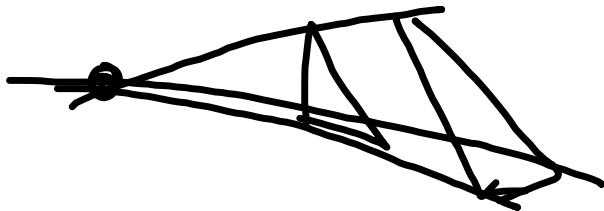
$0 < k < 1$ — Reduction 

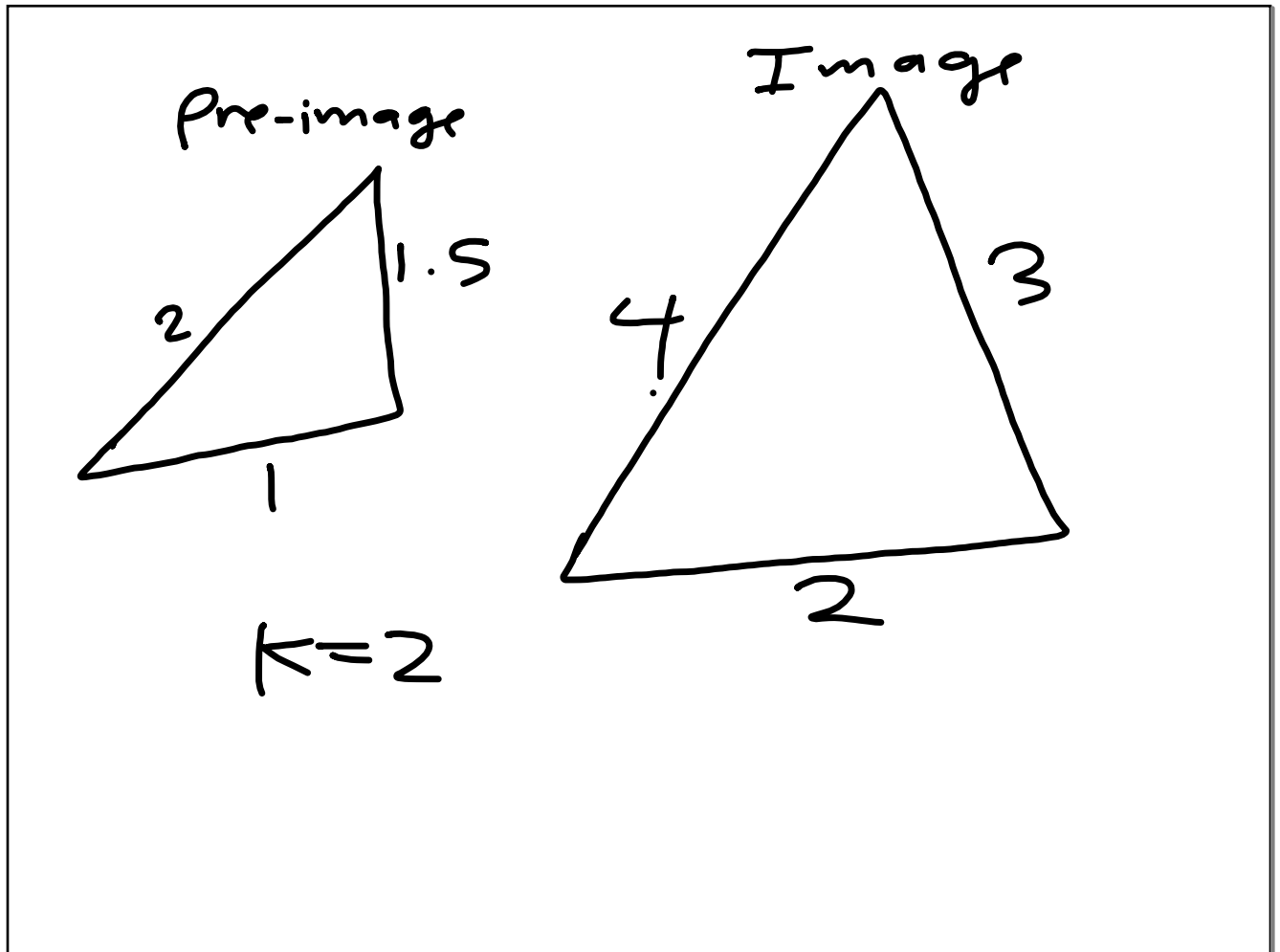
$k = 1$ congruent

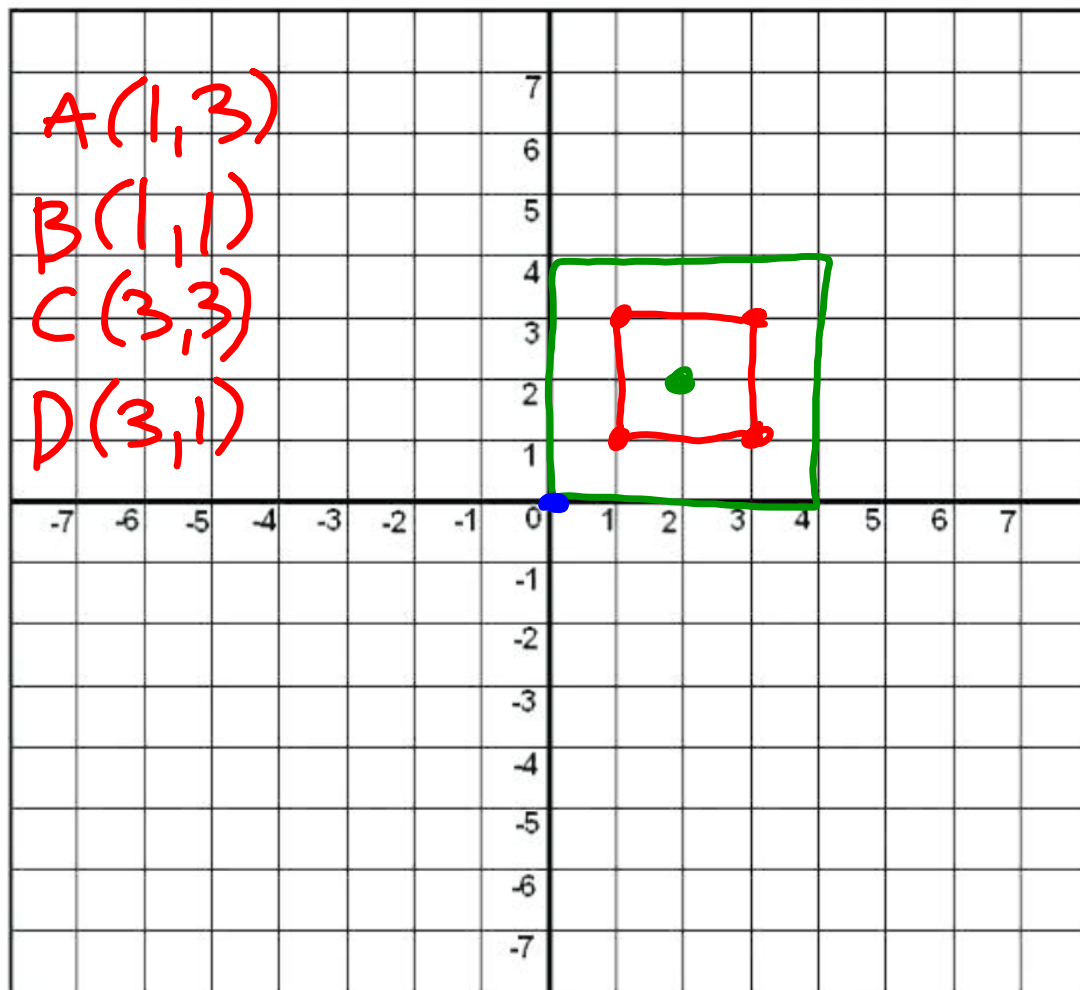
Scale Factor $k = \frac{\text{Image}}{\text{Pre-image}}$

Center of dilation: point from which you dilate

Vertex: point where two or more lines meet
→ Corner of a polygon







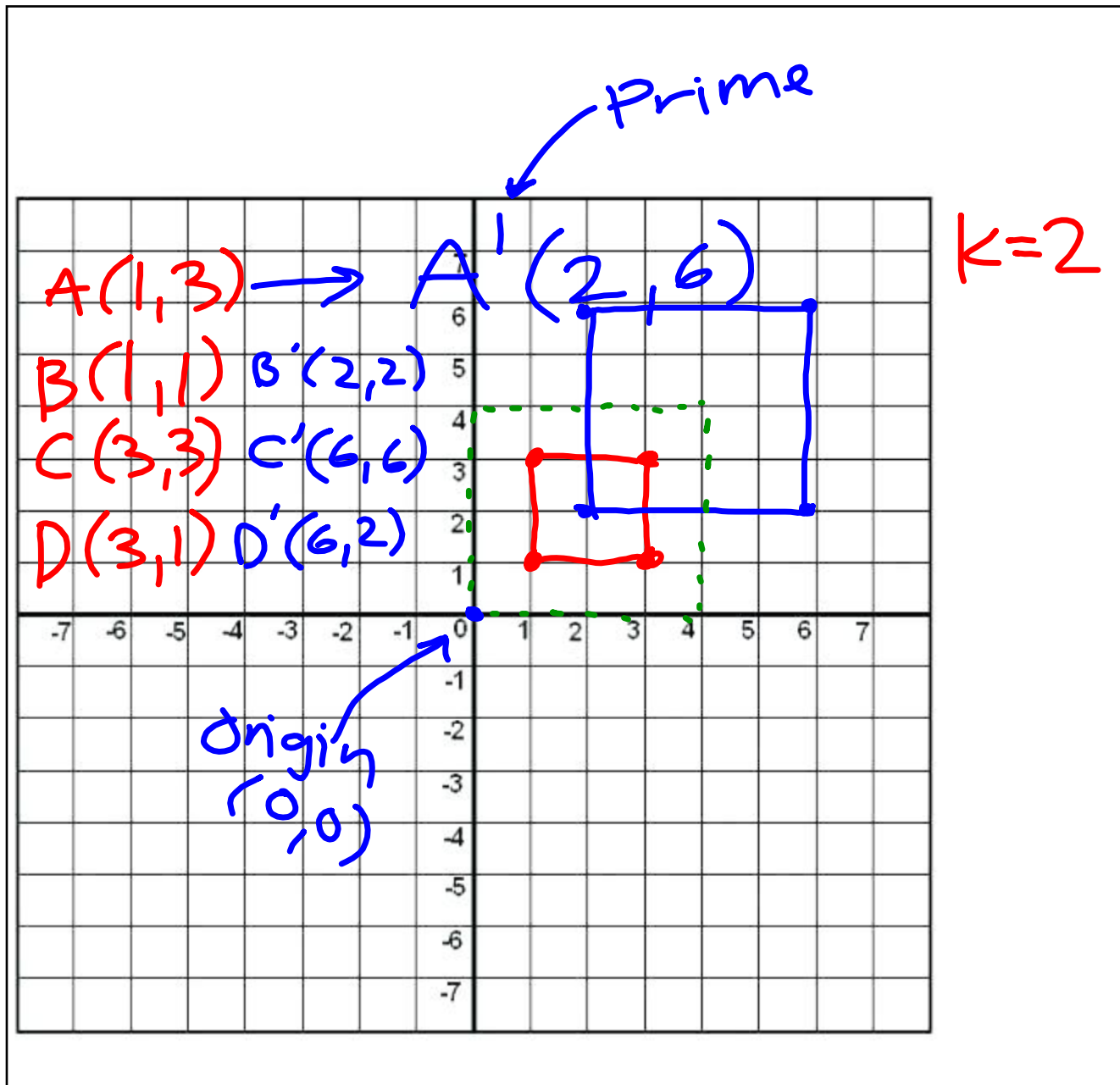
A(1,3)

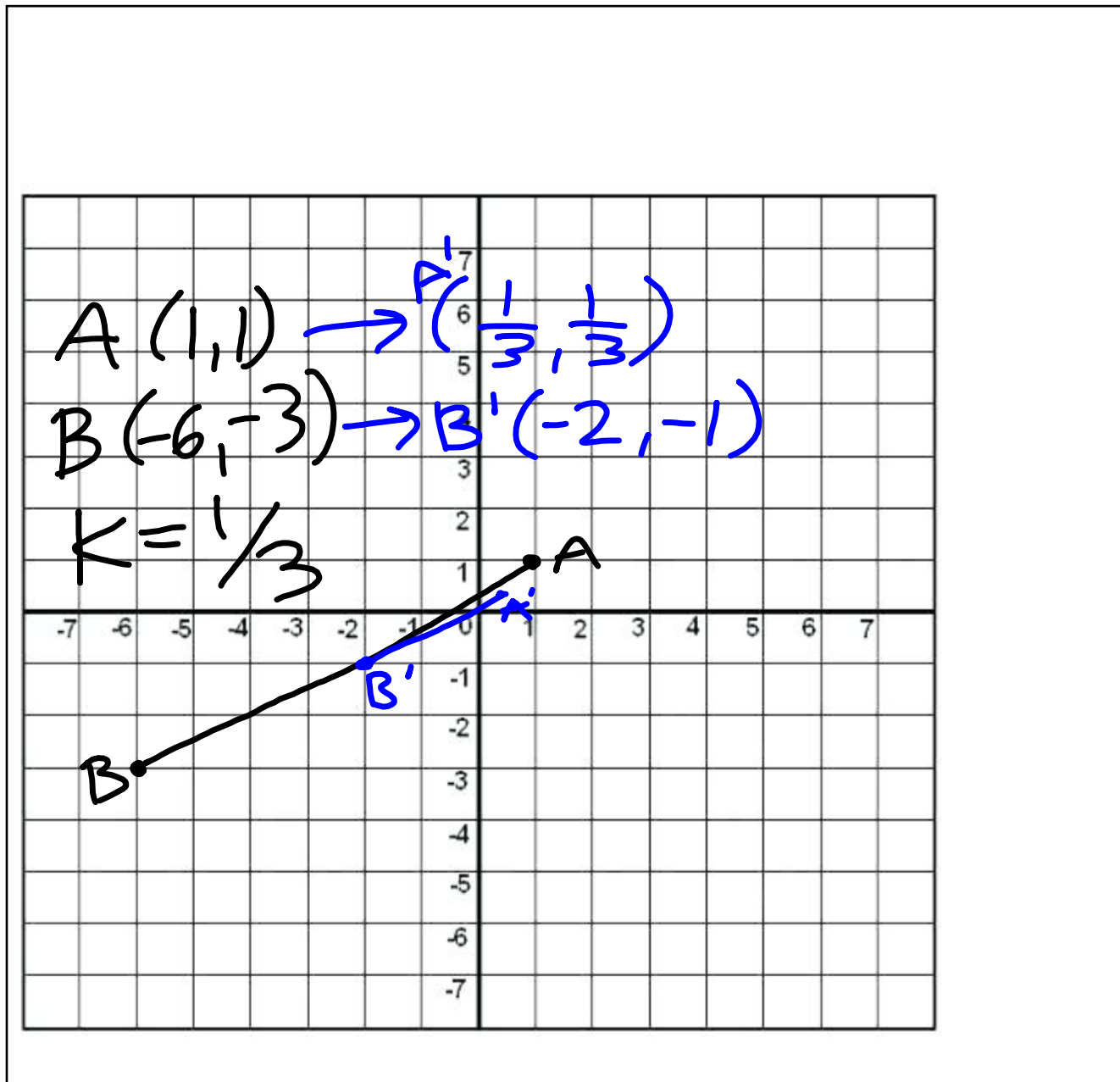
B(1,1)

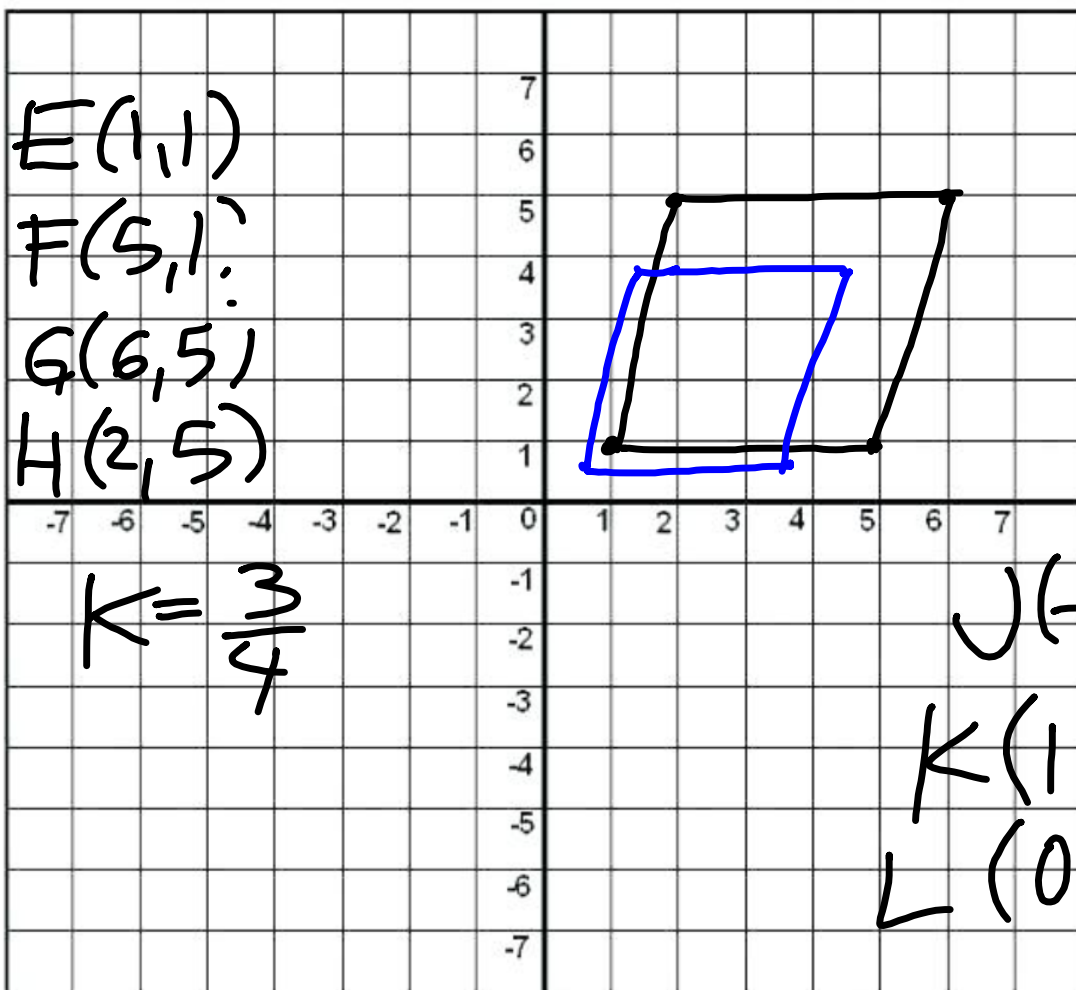
C(3,3)

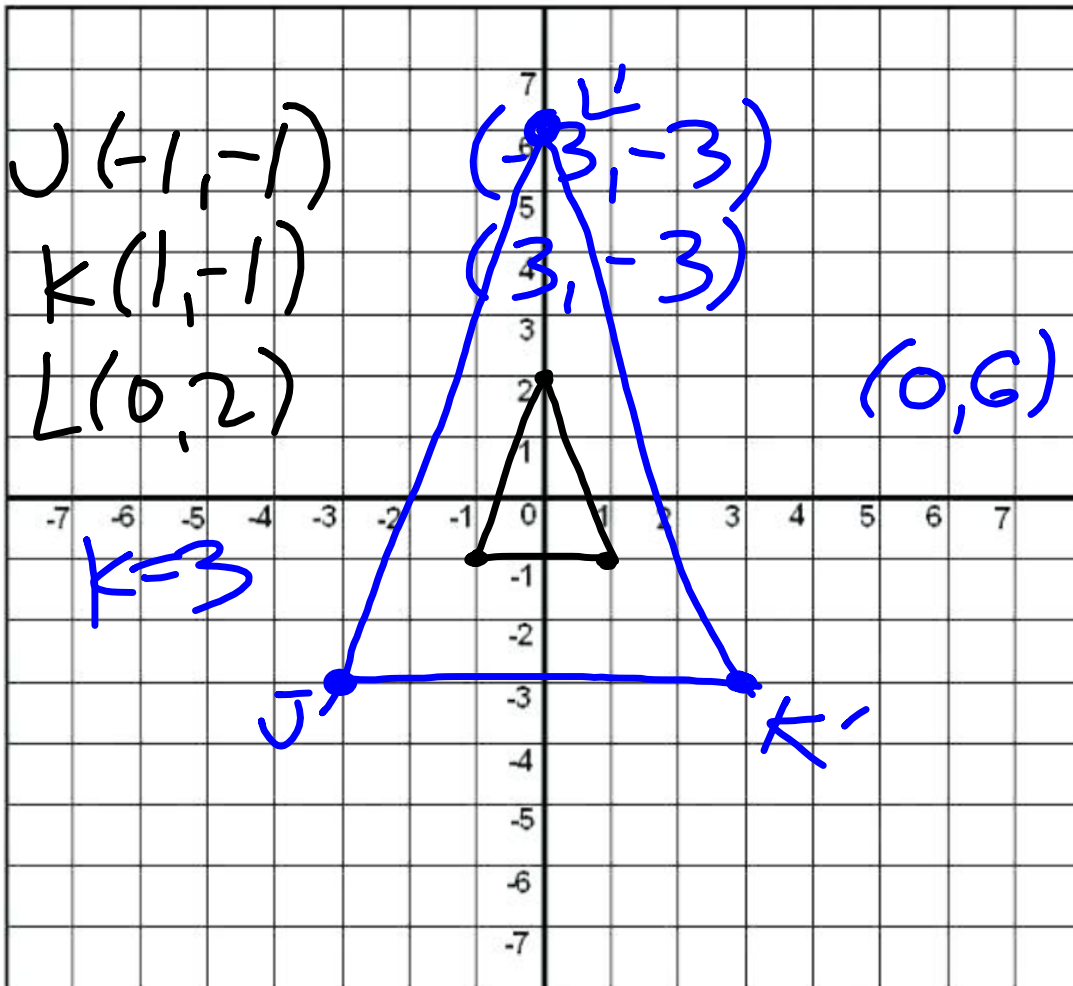
D(3,1)

$k=2$









Challenge Problem

