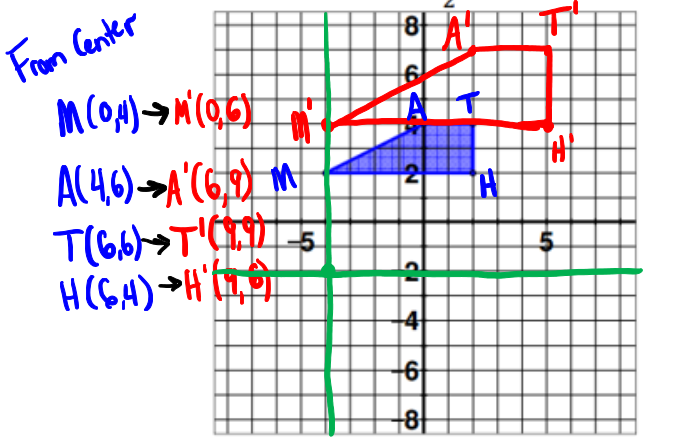
What if the center is not at the origin?

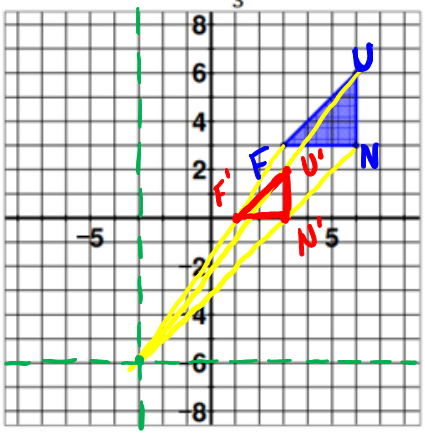
23. Dilate by $c = \frac{3}{2}$, center $(-4, -2)$



Dilations: Center not at Origin

IS

17. Dilate by $c = \frac{2}{3}$, center $(-3, -6)$



From Center

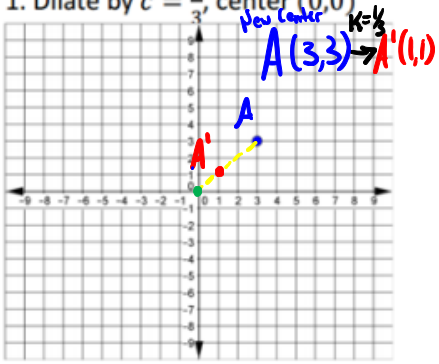
$F(6,9) \xrightarrow{K=\frac{2}{3}} F'(4,6)$

$U(9,12) \rightarrow U'(6,8)$

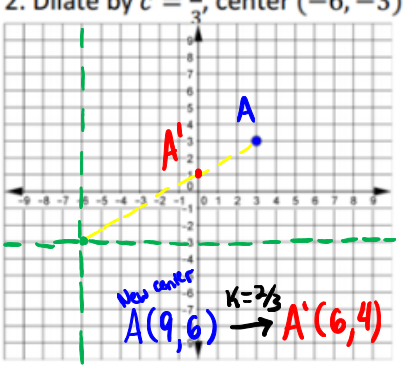
$N(9,9) \rightarrow N'(6,6)$

Dilations: Center not at Origin

1. Dilate by $c = \frac{1}{3}$, center $(0,0)$



2. Dilate by $c = \frac{2}{3}$, center $(-6,-3)$



3. Dilate by $c = 2$, center $(4,6)$