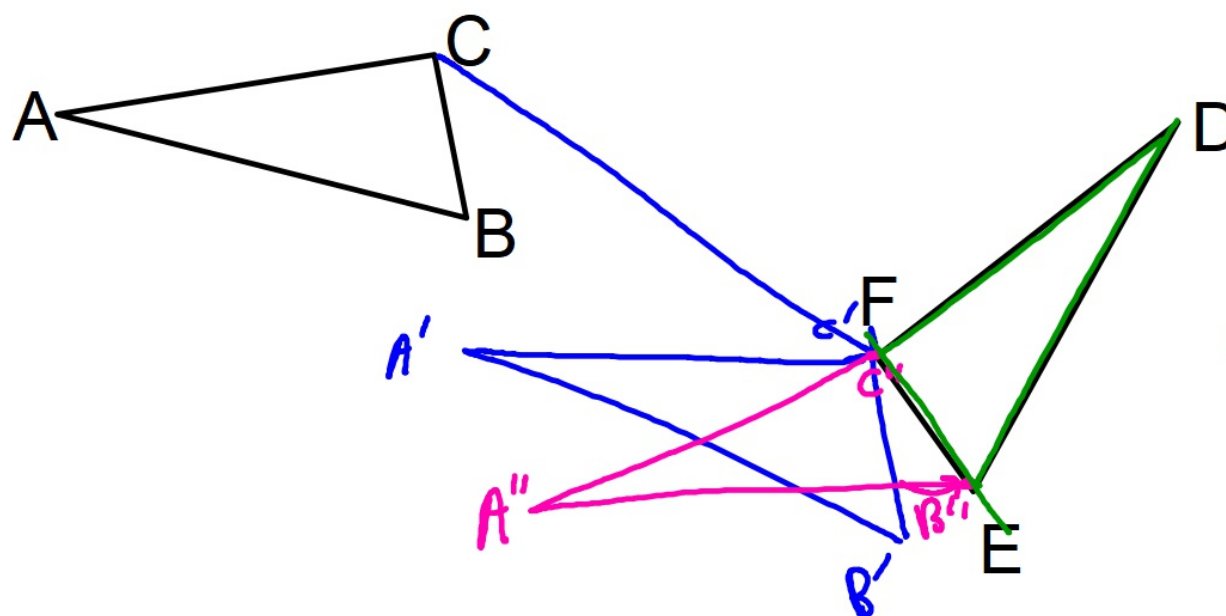


Good morning: warm up in notebooks

Describe a sequence of rigid motions that would carry $\triangle ABC$ onto $\triangle DEF$



① translate $\triangle ABC$ along \vec{CF}

② Rotate $\triangle A'B'C'$ around C' CW until $B' \rightarrow E$

③ Reflect $\triangle A''B''C''$ across \overline{FE} .

VRG

Assessments....pretty good!

Retakes today and tomorrow in DS

HW for retakes

CO-A2a: 'performing and describing transformations'

CO-A5a: 'even more transformations practice'

Non-origin Rotations

Rotate $\triangle BCD$ 90° CW about point J.

Rotate paper
① by the amount specified...

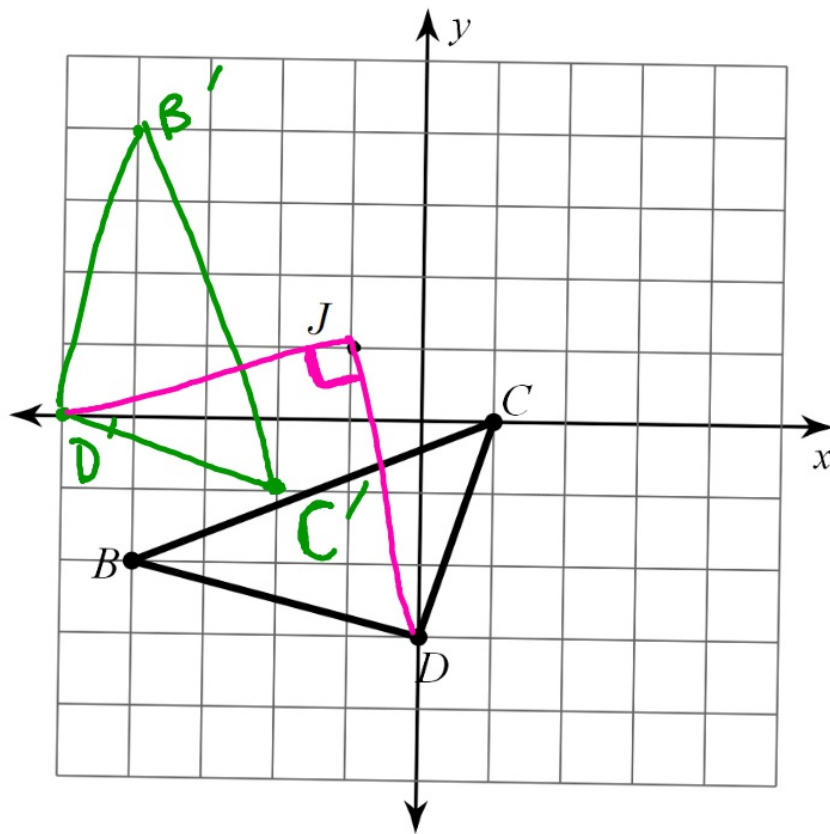
② describe how to get from J to each point.

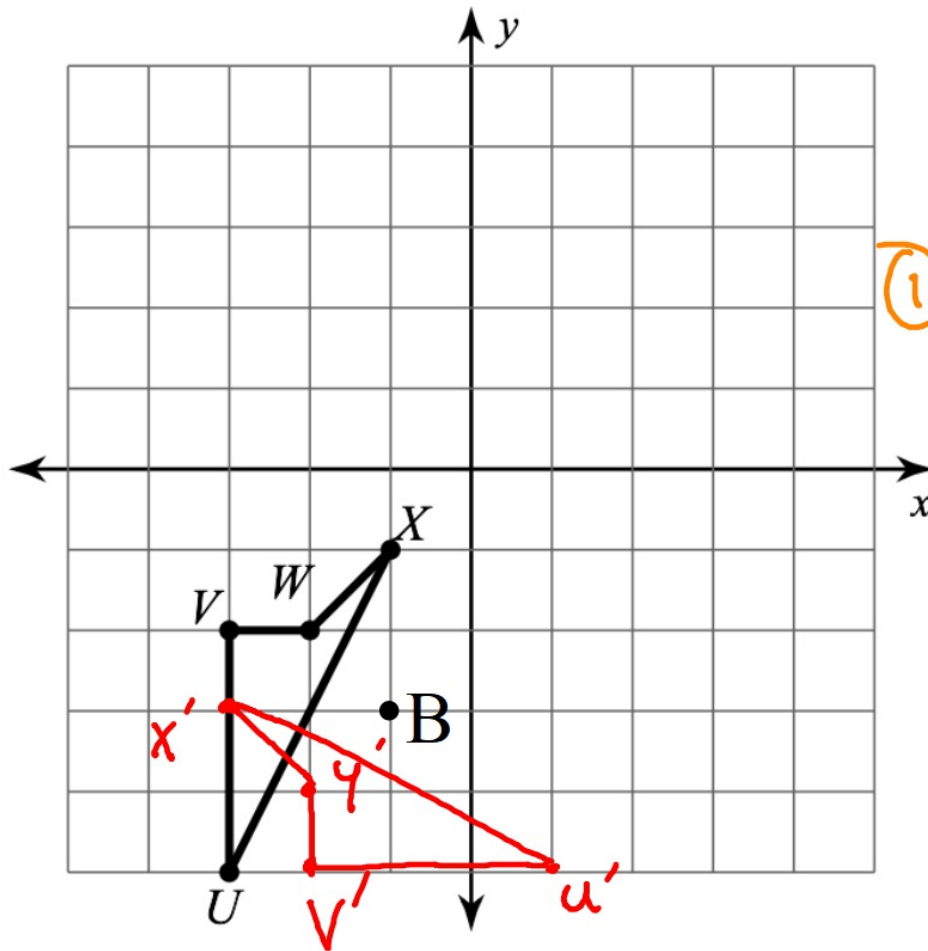
C: left 1, down 2

D: left 4, down 1

B: left 3, up 3

③ Return paper to original orientation
and use "directions"





90° CCW about B

Alternate method

① Assign "coordinates" to points pretending B is the origin

X: (0, 2)

W: (-1, 1)

V: (-2, 1)

U: (-2, -2)

② use the 90° ccw rule to these "coordinates"
 $(x, y) \rightarrow (-y, x)$



X' (-2, 0)

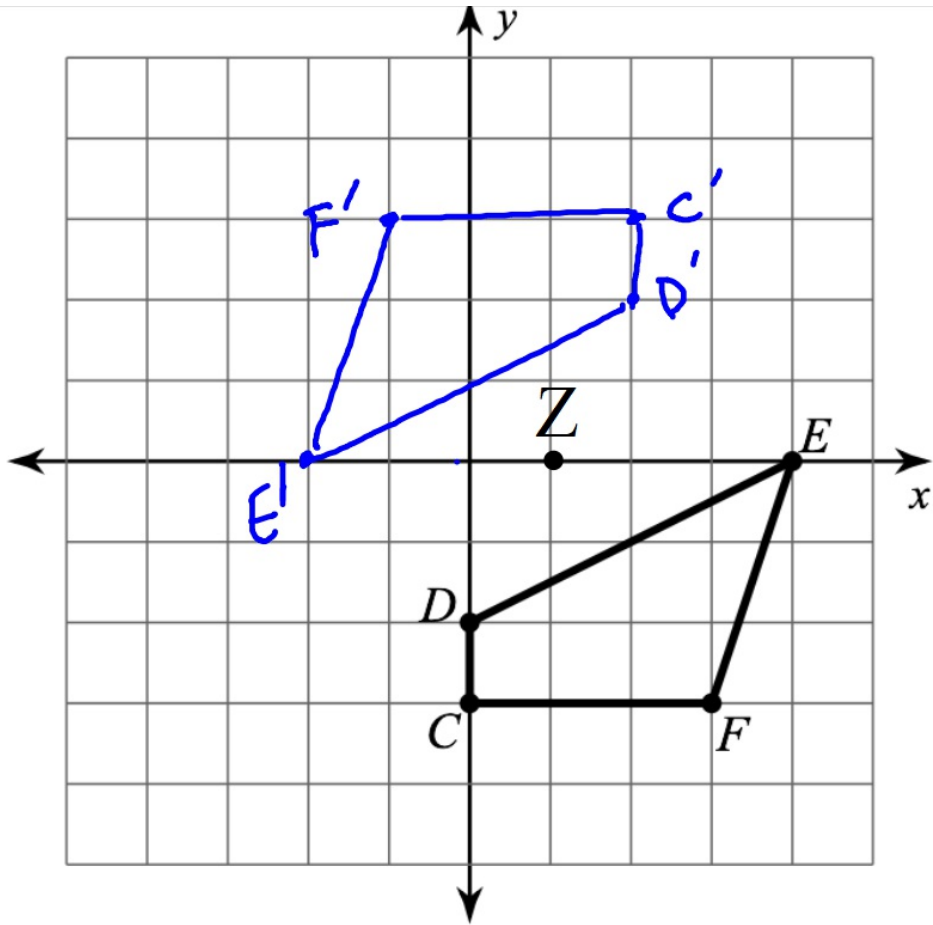
V: (-1, -2)

Y' (-1, -1)

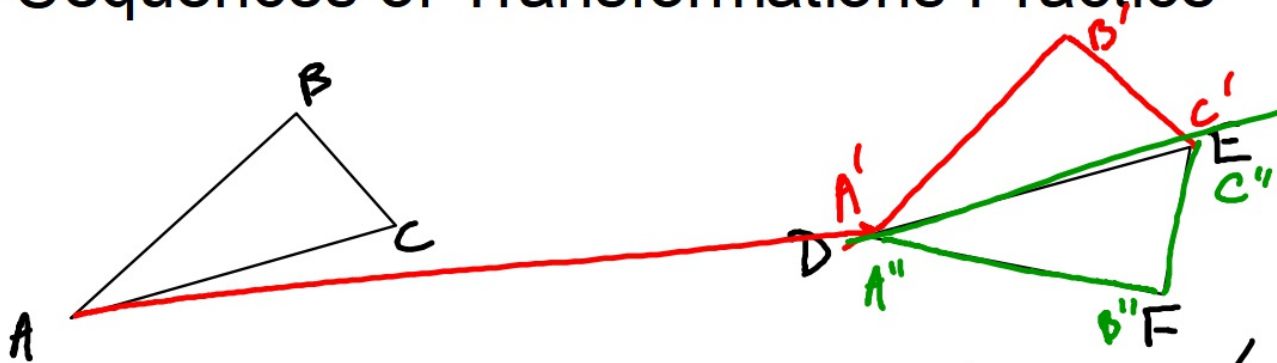
U: (2, -2)

③ plot these pts from B.

180° about Z



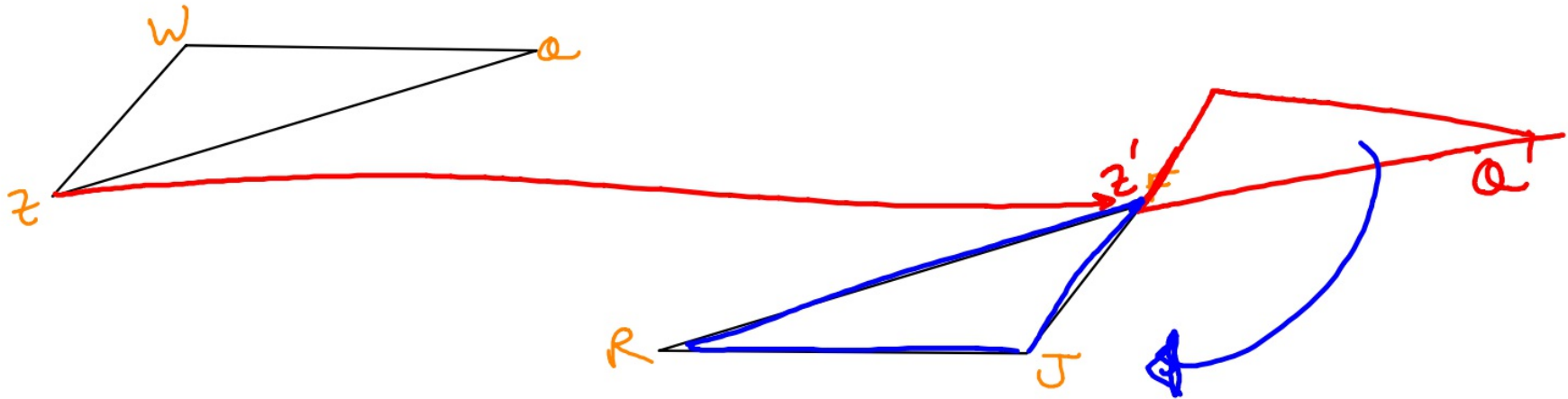
Sequences of Transformations Practice



Steps to carry $\triangle ABC$ onto $\triangle DFE$ (note the order... it matters!)

① translate $\triangle ABC$ by \vec{AD}

② reflect $\triangle A'B'C'$ across \overline{DE}



Steps to carry ΔZWA onto ΔFJR

① translate ΔZWA along \vec{ZF}

② Rotate $\Delta Z'W'A'$ around F Clockwise until A' is on RJ

HW

handout
due Tuesday

next assessment: Thursday