2-step transformations:

name:_____

1. Show the position of the triangle if you reflect first in m and then in n.

vector is ⊥ to m and n

twice the distance
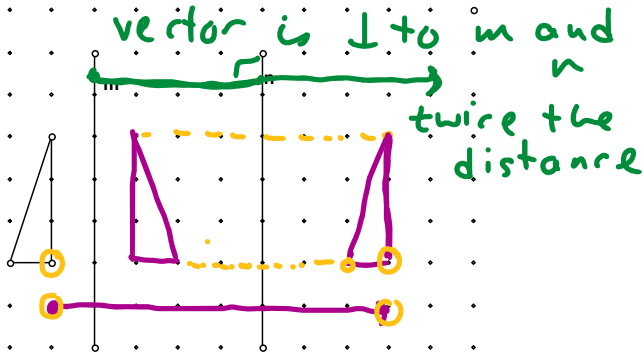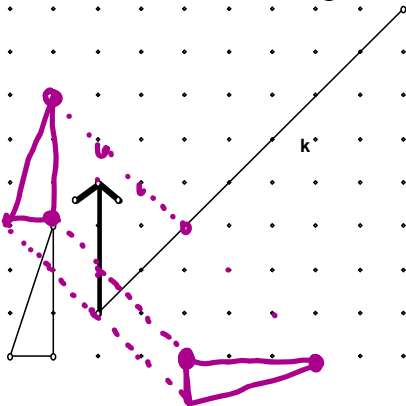
2. Show the position of the triangle if you reflect first in m and then in k:

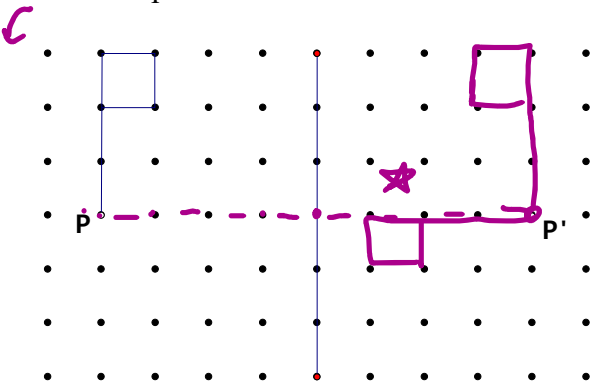This same thing can be done in one step by a translation. Describe that translation:

translate right 8"

by vector ⟨8,0⟩

This same thing can be done by a rotation. Estimate the rotation point and angle:

rotation around P (where the 2 lines intersect) by 90° clockwise (2 × ∠APB)

3. Show the result of first translating along the vector, and then reflecting in the line k:

4. Completely describe the rigid motion (reflection, rotation or translation) that moves A to B:

rotate around P

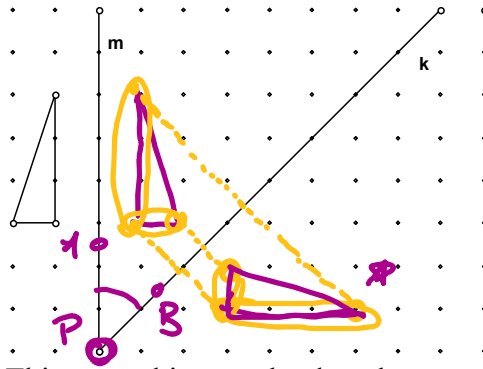$\frac{360°}{6} = 60°$

by 120° counterclockwise

Please note that *P'* is the image of the point *P* after the first transformation

5.a. Show the final image of the flag after : first reflecting across the line, and then rotating 90° around point P'
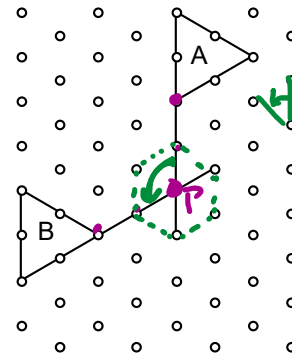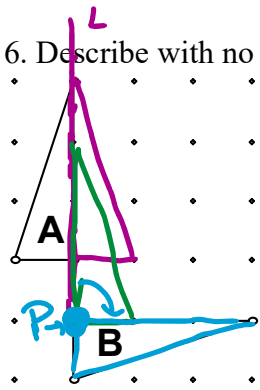
5b. Show the final image of the flag after first rotating -90° about the point P, and then reflecting across the line
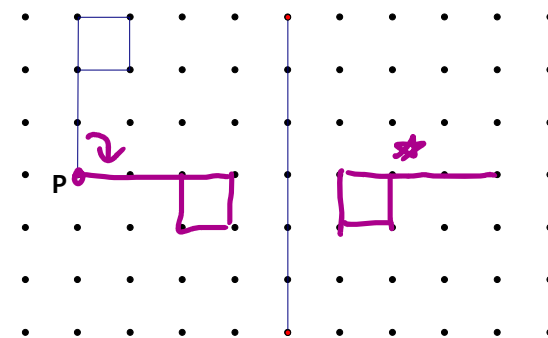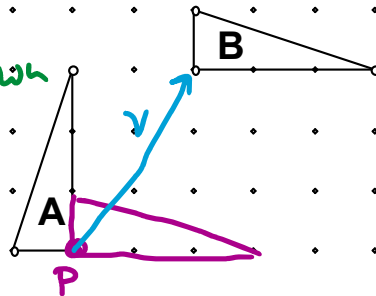
5c. Show the final image of the flag after first reflecting across the line, and then rotating 90° around point P (not P').
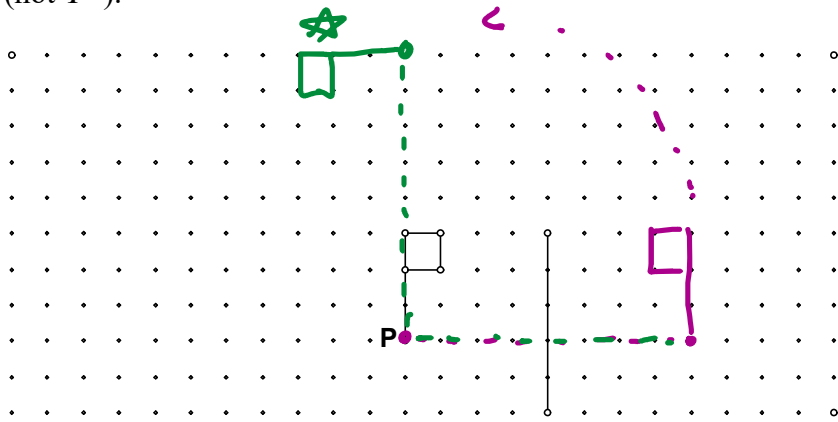
6. Describe with no more than 3 steps how to get from triangle A to triangle B:
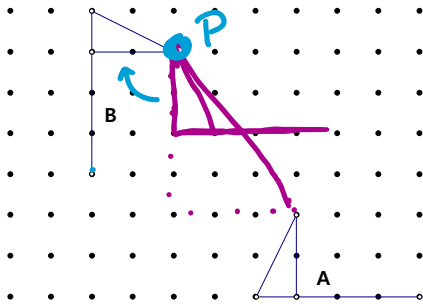
reflect across L.
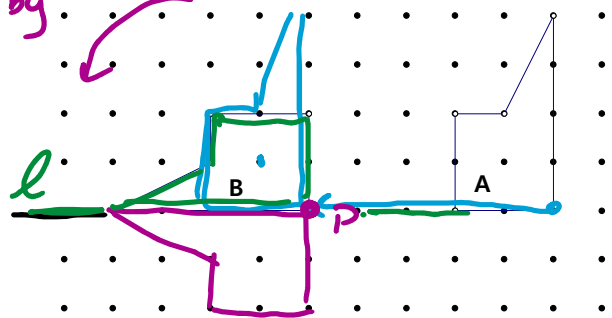
translate down 1 unit

Rotate 90° Clockwise around P.

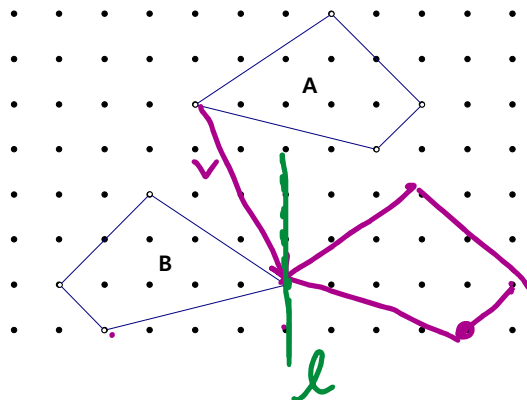Rotate 90° clockwise around P

Translate by vector V.

7. Describe with no more than 3 steps how to get from shape A to shape B in each problem:

Translate by $\langle -3, 4 \rangle$.

Rotate $-90°$ around P

Translate left 5
Rotate 90° around P
reflect across l

translate by vector v
reflect across l.