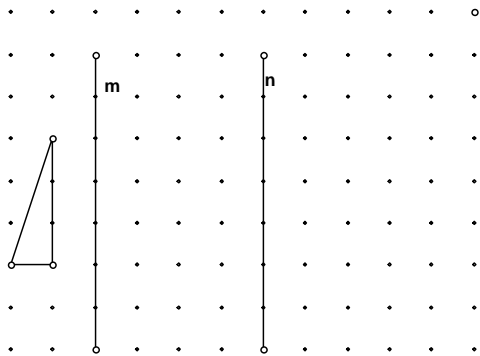


**2-step transformations:**

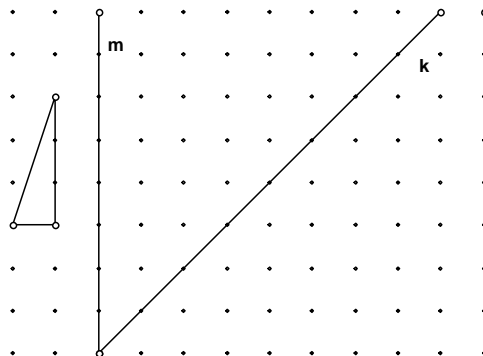
1. Show the position of the triangle if you reflect first in  $m$  and then in  $n$ .



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

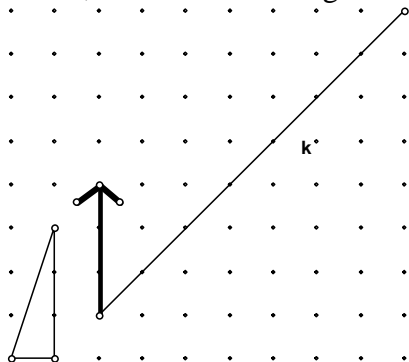
name: \_\_\_\_\_

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

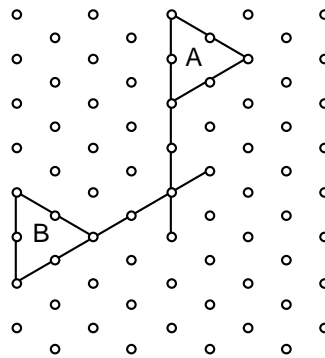


This same thing can be done by a rotation. Estimate the rotation point and angle:

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

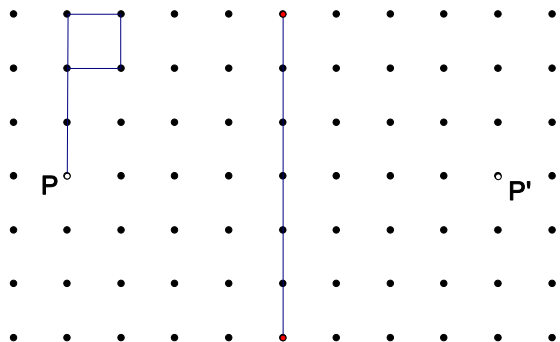


4. Completely describe the rigid motion (reflection, rotation or translation) that moves A to B:

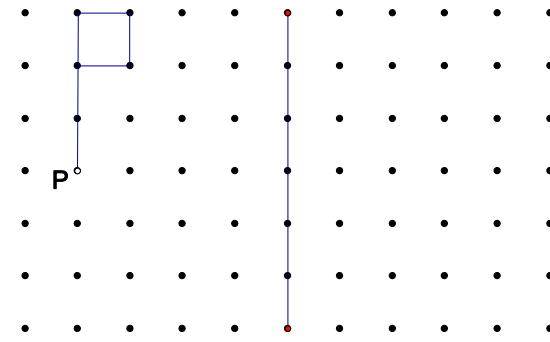


Please note that  $P'$  is the image of the point  $P$  after the first transformation

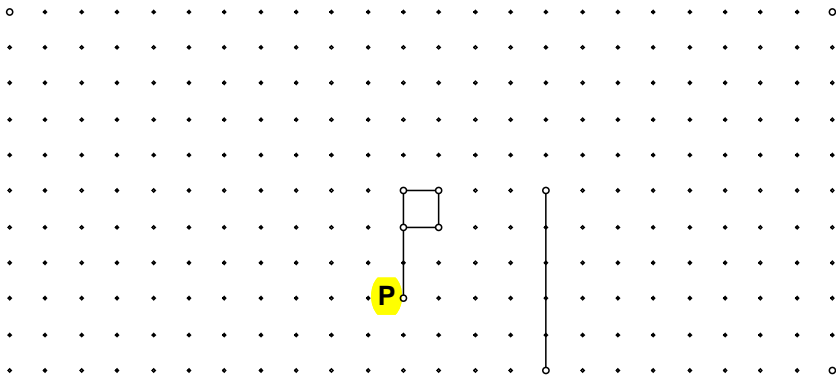
5.a. Show the final image of the flag after : first reflecting across the line, and then rotating  $90^\circ$  around point  $P'$



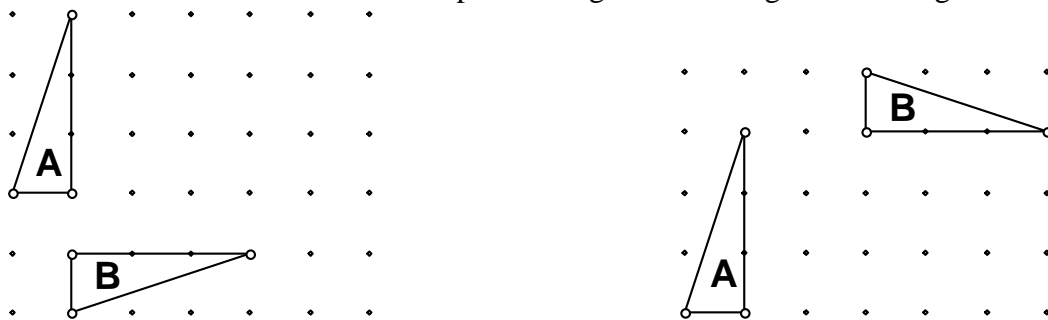
5b. Show the final image of the flag after first rotating  $-90^\circ$  about the point P, and then reflecting across the line



5c. Show the final image of the flag after first reflecting across the line, and then rotating  $90^\circ$  around point P (not  $P'$ ).



6. Describe with no more than 3 steps how to get from triangle A to triangle B:



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

