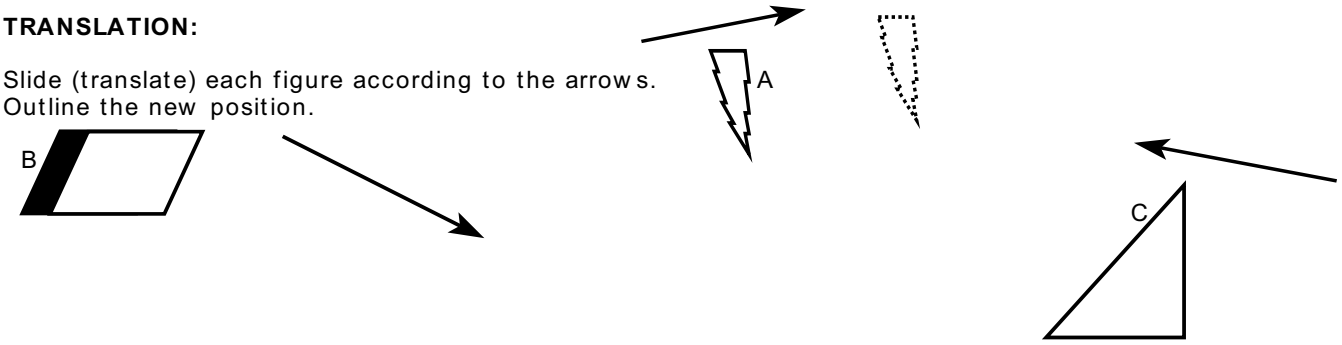
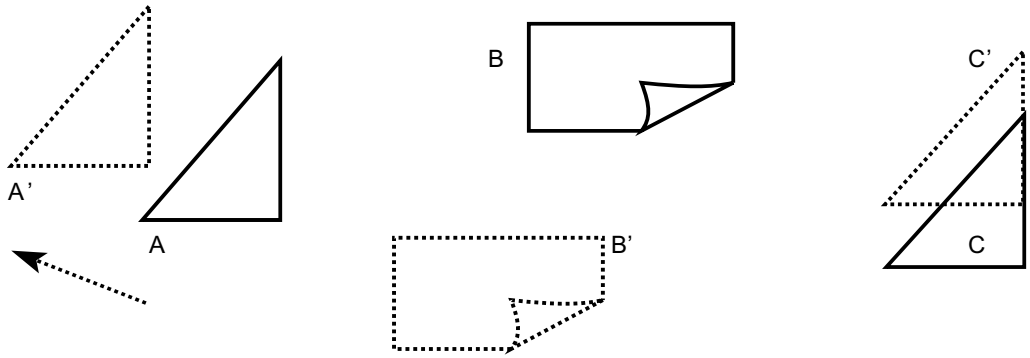
TGE-1 Transformations —Translation, Reflection & Rotation (Slides, Flips and Turns) TGE-1

TRANSLATION:

E1. Slide (translate) each figure according to the arrows. Outline the new position.

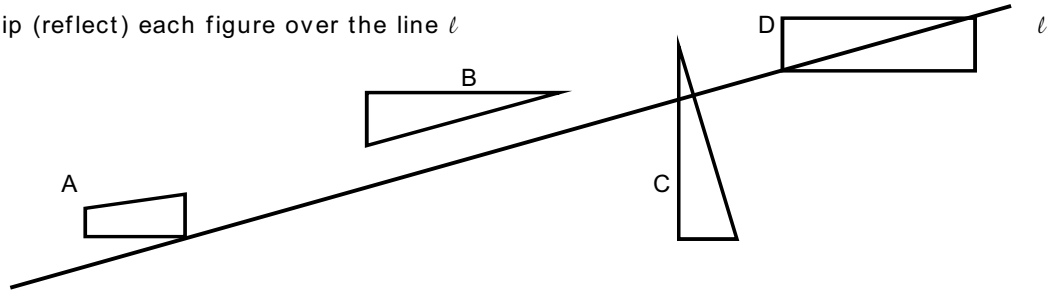


E2. Find the vector (arrow) of translation that takes figure A to A'; do the same, for B to B' and for C to C',

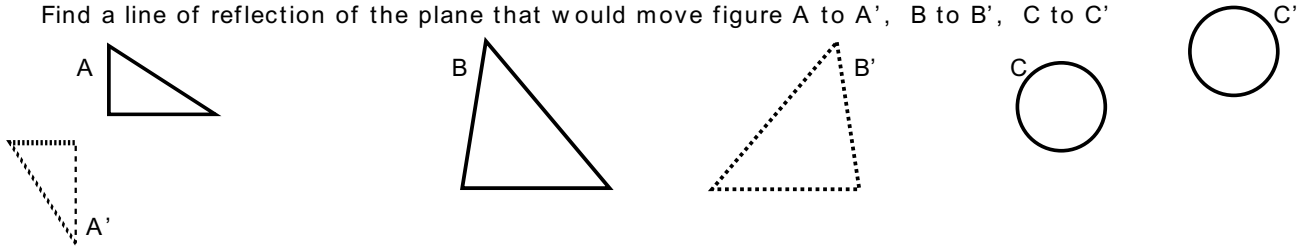


REFLECTION:

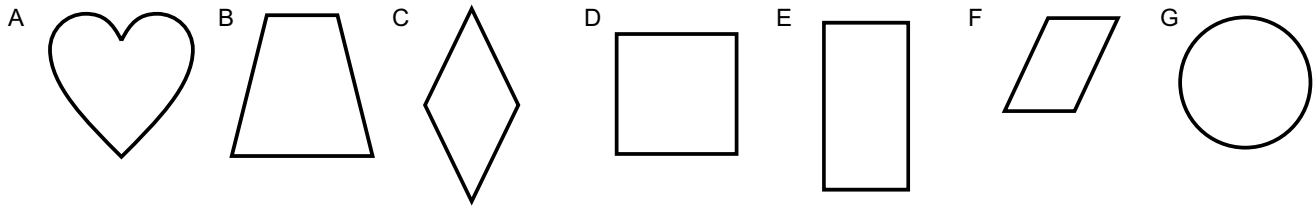
E3. Flip (reflect) each figure over the line ℓ



E4. Find a line of reflection of the plane that would move figure A to A', B to B', C to C'

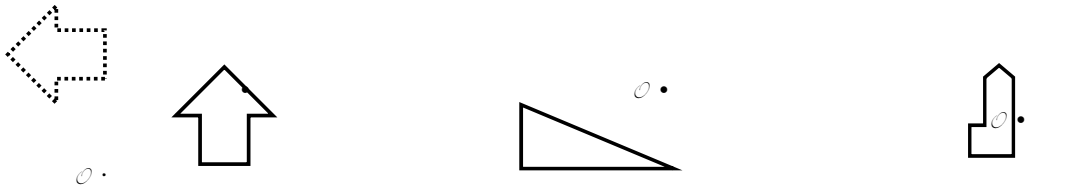


E5. Can you find a line of reflection that would put each figure back on top of itself? (If so, how many?)



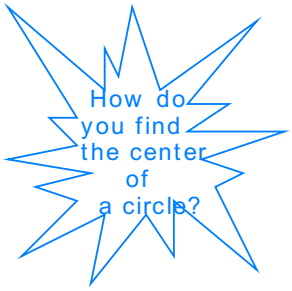
ROTATIONS:

E6. Rotate each figure about the point ○ according to the given angle and direction.

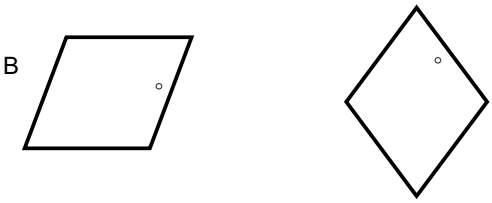


A. 90° (counterclockwise) B. 180° C. 270°

E7.* Find the center of rotation that takes figure A to A'. What is the angle of rotation? (Hint: When the plane rotates, what path do the points follow?)



E8.* Find the center and angle of rotation that takes figure B to B'.



E9. Identify the type of transformation that takes the dotted figure to each of the results, A, B, C, D, E & F.