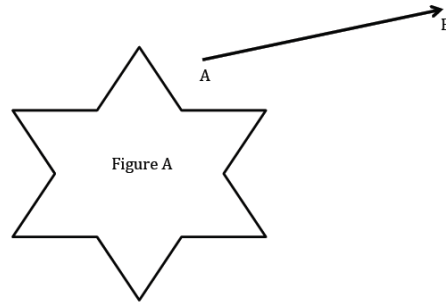
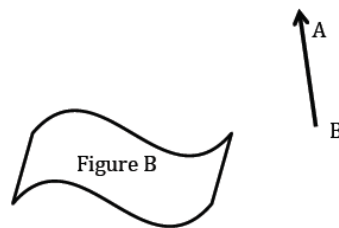


Problem Set

1. Translate the plane containing Figure A along \overrightarrow{AB} . Use your transparency to sketch the image of Figure A by this translation. Mark points on Figure A , and label the image of Figure A accordingly.

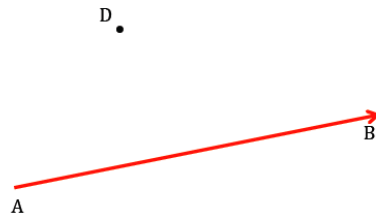


2. Translate the plane containing Figure B along \overrightarrow{BA} . Use your transparency to sketch the image of Figure B by this translation. Mark points on Figure B , and label the image of Figure B accordingly.



3. Draw an acute angle (your choice of degree), a segment with length 3 cm, a point, a circle with radius 1 in., and a vector (your choice of length, i.e., starting point and ending point). Label points and measures (measurements do not need to be precise, but your figure must be labeled correctly). Use your transparency to translate all of the figures you have drawn along the vector. Sketch the images of the translated figures and label them.
4. What is the length of the translated segment? How does this length compare to the length of the original segment? Explain.
5. What is the length of the radius in the translated circle? How does this radius length compare to the radius of the original circle? Explain.
6. What is the degree of the translated angle? How does this degree compare to the degree of the original angle? Explain.

7. Translate point D along vector \overrightarrow{AB} , and label the image D' . What do you notice about the line containing vector \overrightarrow{AB} and the line containing points D and D' ? (Hint: Will the lines ever intersect?)



8. Translate point E along vector \overrightarrow{AB} , and label the image E' . What do you notice about the line containing vector \overrightarrow{AB} and the line containing points E and E' ?

