Name _____ Date _____ 1/8 _____
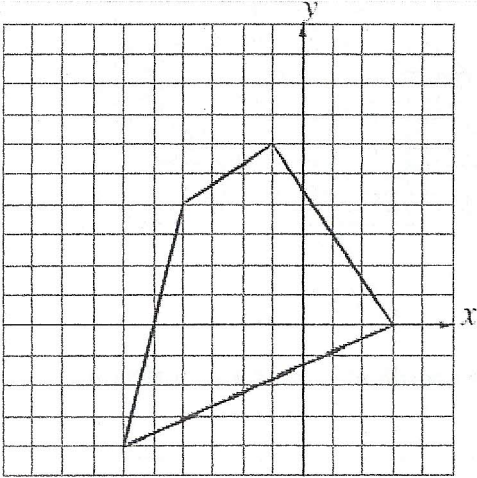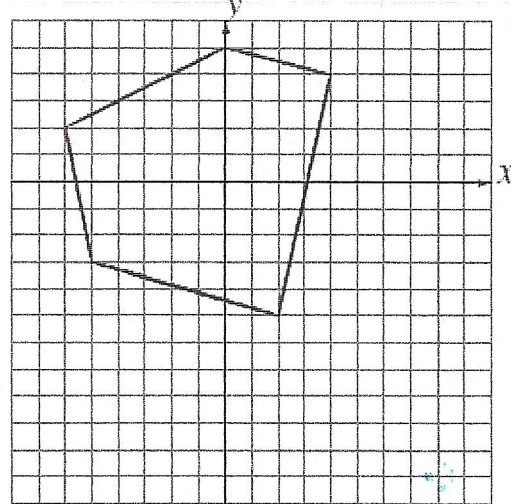
Coordinate Algebra
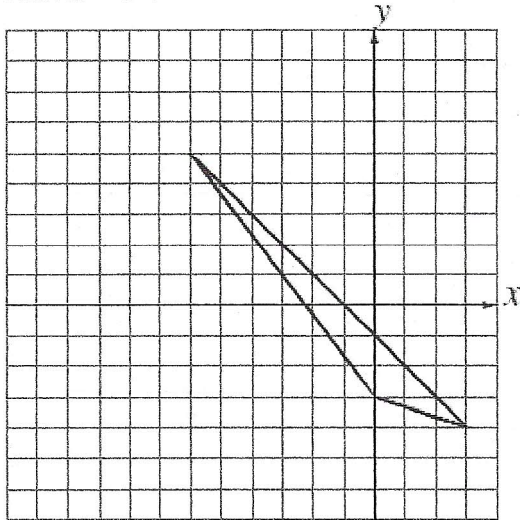
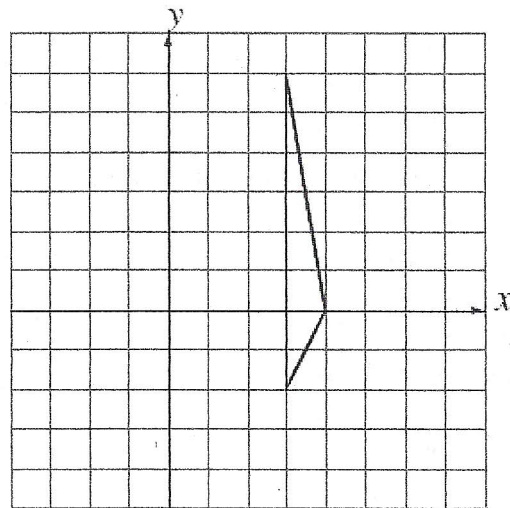Transformations Homework

1.   Translate by (-2, 3).

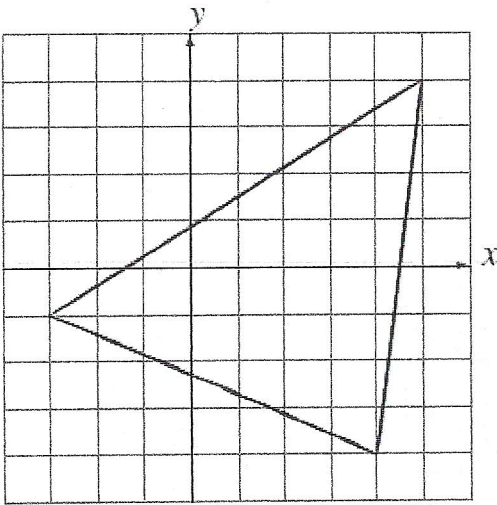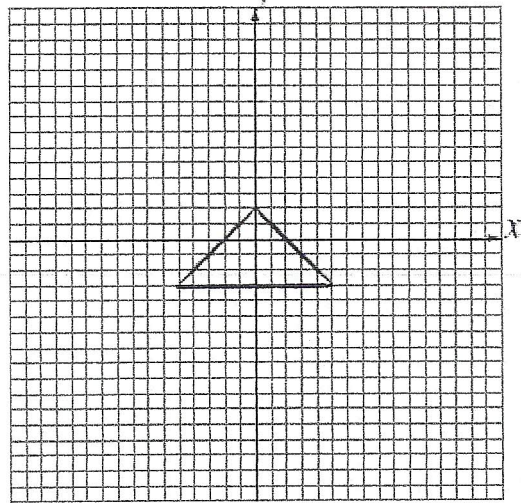2.   Translate by (4, -6).

3.   Reflect over x = -4.

4.   Rotate $180°$ about (2, 1).

5. Dilate by $\frac{1}{4}$ using center $(0, 0)$.

6. Dilate by 3 using center $(0, 0)$.

7. Triangle ABC has coordinates A(-3, 7), B(4, 1), and C(2, -1). Find the coordinates of its image after a....

a) reflection over the y-axis: _____

   rule: _____

b) translation to the left 6 units and up 1 unit: _____

   rule: _____

c) 270° clockwise rotation around the origin: _____

   rule: _____

d) reflection over y=-x: _____

   rule: _____

e) 90° clockwise rotation around the point (1, -2): _____

   rule: _____