

Extra Credit Geometry Project: Translations, Rotations, Reflections, Dilations

1. Get 2 full sheets of graph paper, with small squares. (Roughly 1/4 inch or smaller is good.)
2. Plot the Triangle ABC: A(4, -7), B(6,3), C(2,1)
3. Plot the Rotations of ABC at 90° , 180° , and 270° , CCW around the origin
4. Plot the Dilation of ABC, scale factor 3. [$D(x,y) = (3x, 3y)$]
5. Next sheet of graph paper:
6. Plot ABC again.
7. Translate ABC right 5 and down 3, to make A'B'C'
8. Reflect both ABC and A'B'C' across the line $y=x$.