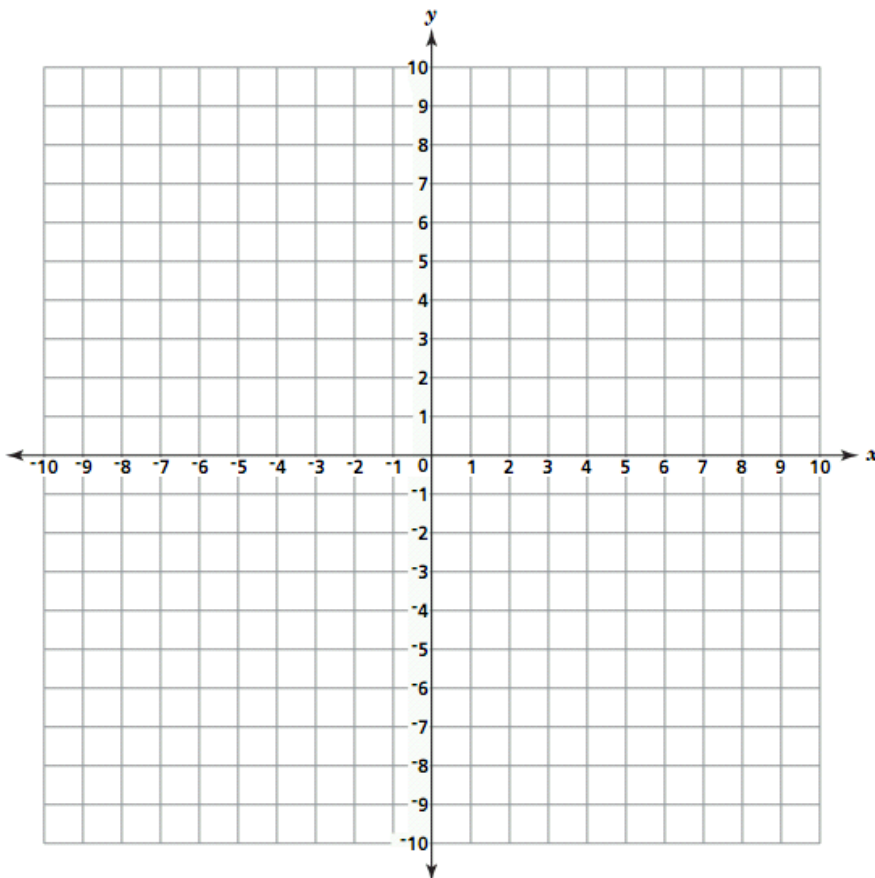
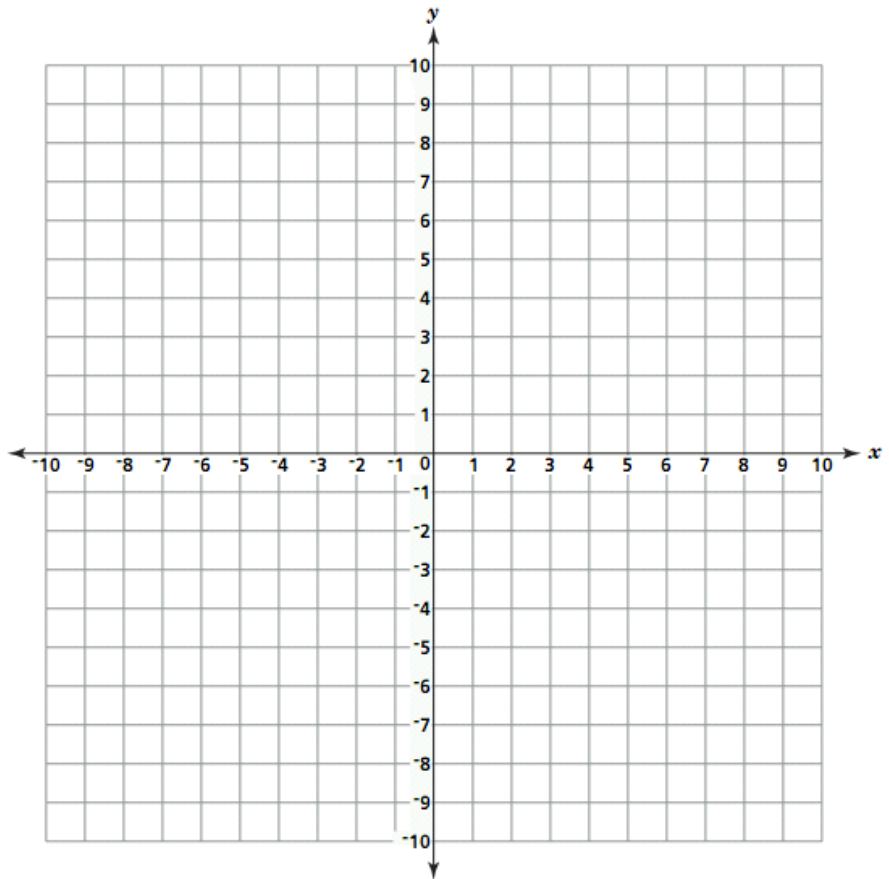


Dilation

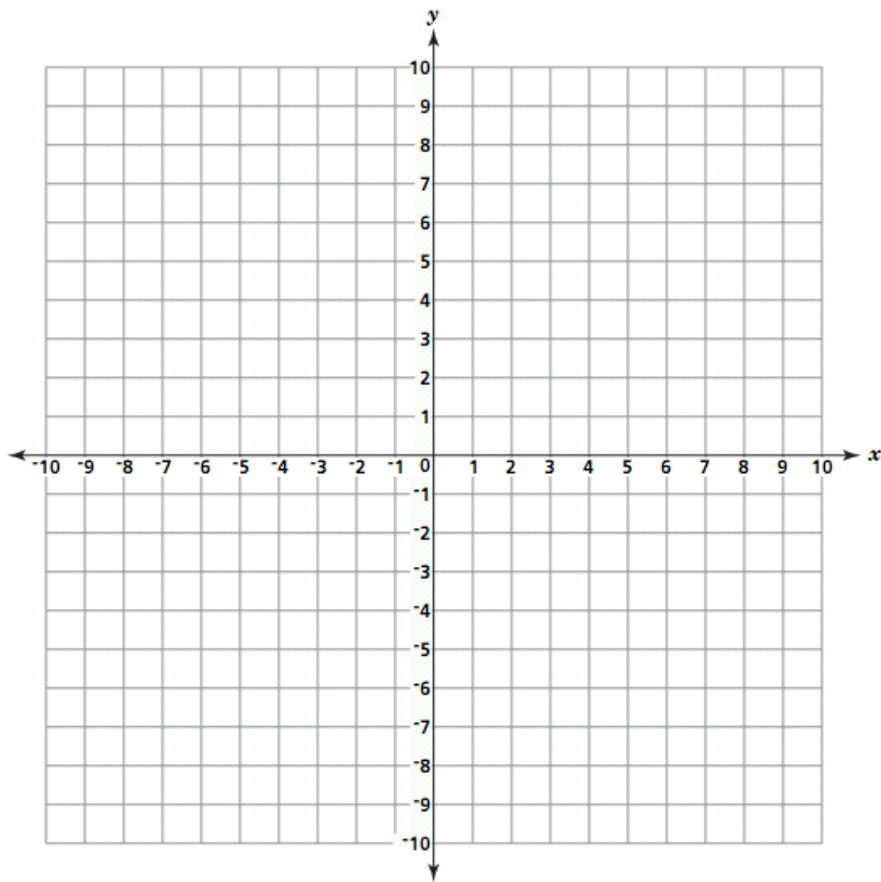
1. Draw the pentagon ABCDE, A(0, 0), B(3, 3), C(6, 3), D(6, -3) and E(3, -3).

Then draw the image of the pentagon with a scale factor of $\frac{1}{3}$. Find the coordinate of the image.



2. Draw the triangle FGH, F(-2, -2) G(1, -1), and H(0, 2).

Then draw the image of the triangle with a scale factor of 4. Find the coordinate of the image.

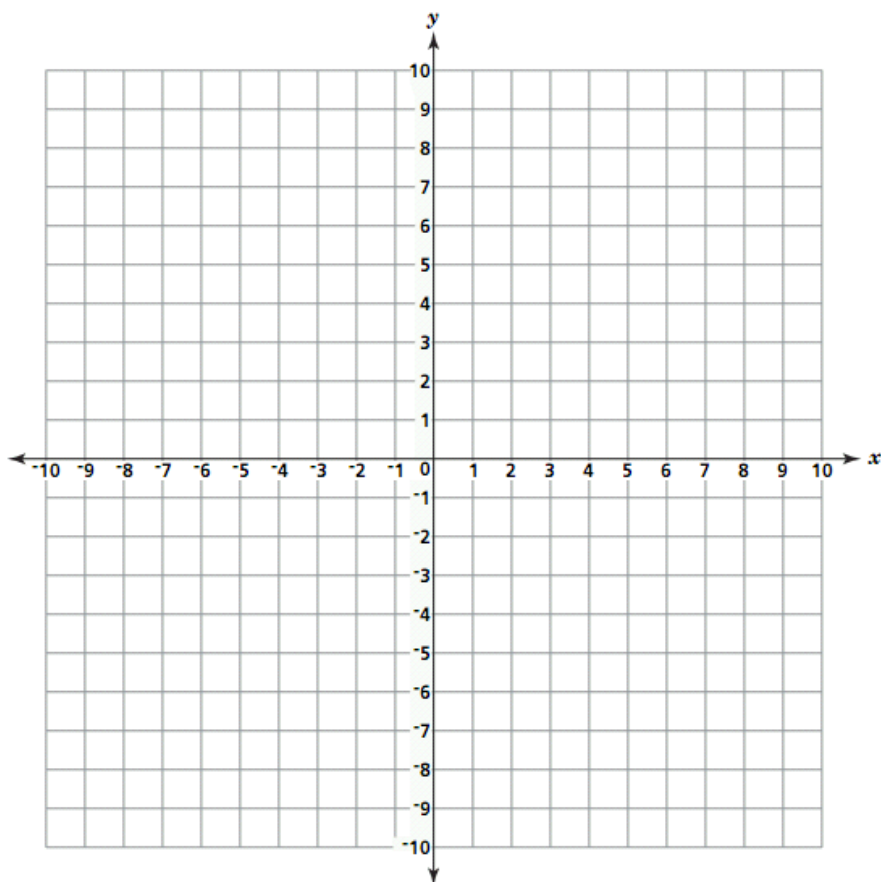


3. Draw the triangle RST, R(-3, 0), S(-1, 4), T(0, 0).

Then draw the image of the triangle after a dilation with a scale factor of 2. Find the coordinate of the image.

Then translate the image using $(x, y) \rightarrow (x + 7, y - 3)$

Find the coordinate of the final image.



4. Draw the triangle XYZ, X(-2, 3), Y(0, 1), and Z(2, 3).

Then draw the image of the triangle after a dilation with a scale factor of 3. Find the coordinate of the image.

Then rotate the image 90 degrees clockwise about the origin.

Find the coordinate of the final image.