

1. Given the following points, plot them and connect to Make $\triangle ABC$.

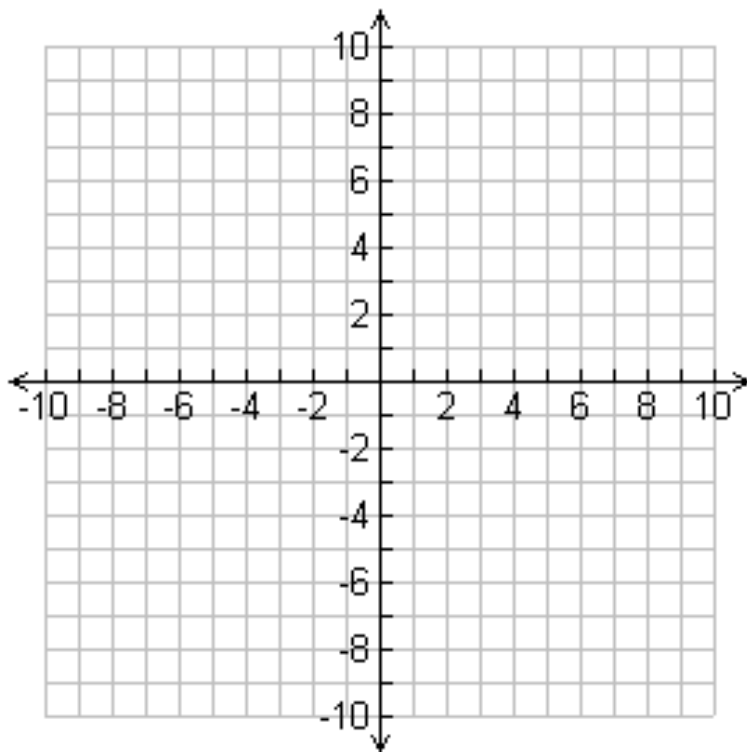
$A(-7, 2)$ $B(-4, 3)$ $C(-6, 8)$

2.. Find and plot the coordinates of $\triangle A'B'C'$ under a 180° rotation of $\triangle ABC$.

$A'(\quad , \quad)$ $B'(\quad , \quad)$ $C'(\quad , \quad)$

3. Find and plot the coordinates of $\triangle A''B''C''$ under a reflection in the x -axis of $\triangle A'B'C'$.

$A''(\quad , \quad)$ $B''(\quad , \quad)$ $C''(\quad , \quad)$



4. On the lines below, explain how you determined your coordinate for A' .

5. On the lines below, explain how you determined your coordinate for B'' .

6. Given the following points, plot them and connect to Make $\triangle DEF$.

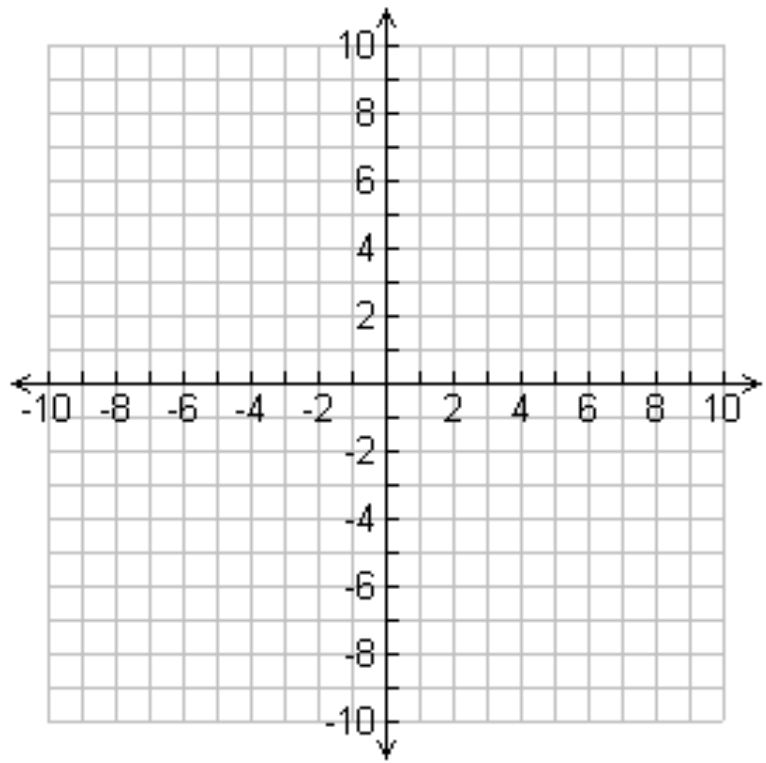
D(8, 1) E(2, 4) C(5, 9)

7. Find and plot the coordinates of $\triangle D'E'F'$ under a *Counterclockwise 90° Rotation of $\triangle DEF$* .

D'(,) E'(,) F'(,)

8. Find and plot the coordinates of $\triangle D''E''F''$ under a *reflection in the y-axis of $\triangle D'E'F'$* .

D''(,) E''(,) F''(,)

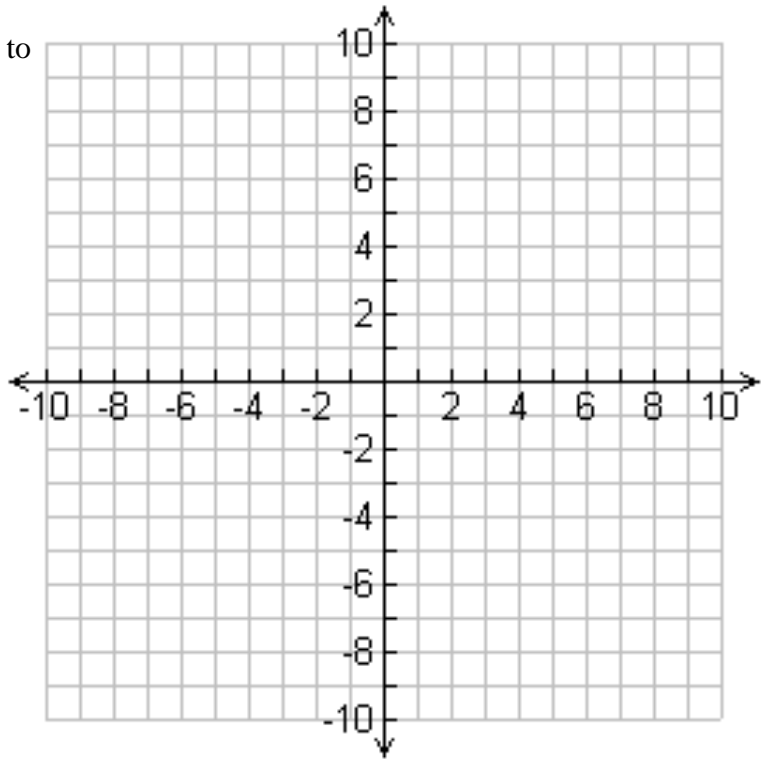


9. On the lines below, explain how you determined your coordinate for D'.

10. On the lines below, explain how you determined your coordinate for F'.

11. Given the following points, plot them and connect to Make $\triangle XYZ$.

$$X(3, -9) \quad Y(6, 3) \quad Z(9, -6)$$



12. Find and plot the coordinates of $\triangle X'Y'Z'$ under a translation $(x - 12, y + 6)$ of $\triangle XYZ$.

$$X'(\quad , \quad) \quad Y'(\quad , \quad) \quad Z'(\quad , \quad)$$

13. Find and plot the coordinates of $\triangle X''Y''Z''$ under a dilation of $\triangle X'Y'Z'$ with a scale factor of $\frac{1}{3} \left(D_{\frac{1}{3}} \right)$

$$X''(\quad , \quad) \quad Y''(\quad , \quad) \quad Z''(\quad , \quad)$$

14. On the lines below, explain how you determined your coordinate for Y' .

15. On the lines below, explain how you determined your coordinate for X'' .
