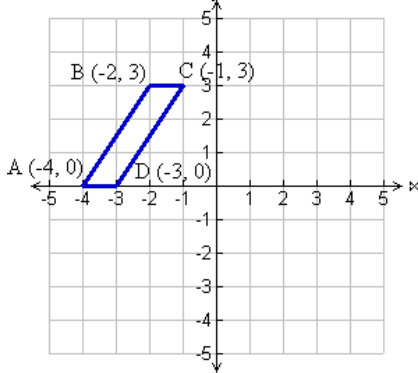
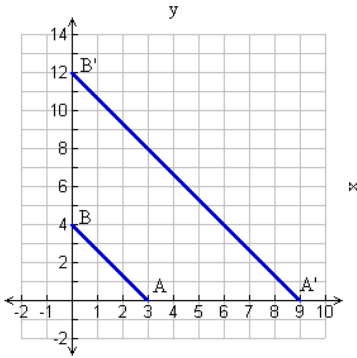


For Exercises 1-5, parallelogram $ABCD$ has vertices as shown.

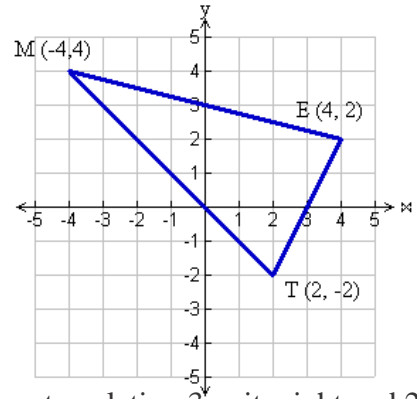


1. If the figure is translated 5 units right, what are the coordinates of C' ?
2. If the figure is translated 1 unit left and 2 units up, what are the coordinates of D' ?
3. If the figure is rotated 270° clockwise about the origin, what are the coordinates of B' ?
4. If the figure is reflected over the x -axis, what are the coordinates of A' ?
5. If the figure is dilated using a scale factor of 4, what are the coordinates of B' ?
6. Triangle DAV has vertices $D(8, 6)$, $A(-4, 10)$, and $V(-6, -2)$. What are the coordinates of the images of points DAV after a dilation with a scale factor of $\frac{1}{2}$?
7. Triangle MSP has vertices $M(-5, 2)$, $S(-3, -4)$, and $P(-2, 2)$. What are the coordinates of the images of MSP after a translation 6 units to the right and 3 units up?
8. Quadrilateral $JRSP$ has vertices $J(2, -9)$, $R(9, -3)$, $S(7, 5)$, and $P(1, 6)$. What are the coordinates of the images of point $JRSP$ after a reflection across the y -axis?
9. Triangle KGP has vertices $K(3, 5)$, $G(1, 7)$, and $P(-2, 6)$. What are the coordinates of the images of point KGP after the triangle is rotated 90° clockwise about the origin?

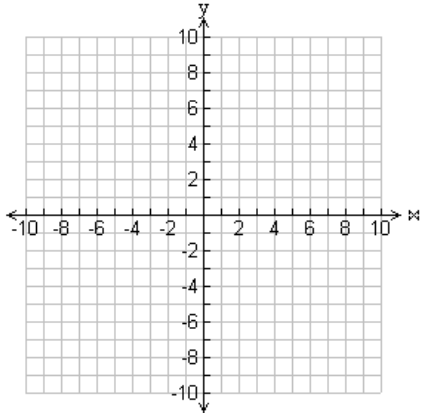
10. The graph shows segment $A'B'$ is a dilation of segment AB . What is the scale factor of the dilation?



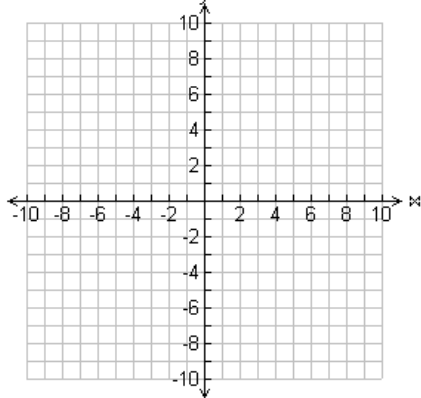
For Exercises 11-13, refer to the graph of $\triangle MET$ at the right.



11. Graph, label and state the coordinates of the image of $\triangle MET$ after a translation 3 units right and 2 units down.



12. Graph, label and state the coordinates of the image of $\triangle MET$ after a reflection over the y-axis.



13. Graph, label and state the coordinates of the image of $\triangle YZW$ after a dilation by a scale factor of $\frac{1}{2}$.

