$\qquad$ PER. $\qquad$ DILATIONS
Using the given scale factor and center, dilate the following figures and state the new coordinates.

| 1. $\left.\begin{array}{l}B^{\prime}\left(\_, \quad, \quad\right) \\ C^{\prime}(\square, \square\end{array}\right)$ | Scale Factor: 3; Center: ' $A$ ' |
| :---: | :---: |
| 2. $R^{\prime}\left(\_, \quad, \quad\right)$ $S^{\prime}\left(\_, \quad, \quad\right)$ $T^{\prime}(\quad, \quad, \quad)$ | Scale Factor: 2; Center: origin |

3. Dilate the triangle below. Use a scale factor of 2. T is the point of dilation.


## REVIEW

| 4. <br> $\mathrm{H}^{\prime}$ <br> J' $\qquad$ <br> K' $\qquad$ <br> L' $\qquad$ | Reflect the figure with the given vertices across the given line. $H(2,1), J(3,1), K(2,-1), L(1,-1) ; y=x$ |
| :---: | :---: |
| 5. M <br> N' P' | Translate the figure with the given vertices the indicated distance. <br> $M(-4,-4), N(-2,-3), P(-1,3)$; left 3 and up 5 |
| 6. $R$ <br> S' <br> T' | $\Delta$ RST has vertices $R(1,2), S(1,4), T(-3,4)$. Rotate $\Delta R S T 90^{\circ}$ clockwise about the origin and then reflect it across the $y$-axis. |
| 7. | The point $A(3,1)$ is rotated $90^{\circ}$ counterclockwise about the point $(-1,2)$ and then reflected across the line $y=5$. Find the coordinates of the new image of the point. |

