**7F Inverse Matrices & Transformations**

1. The triangle T has vertices at A, B and C. The matrix:

$$M=\left[\begin{matrix}4&-1\\3&1\end{matrix}\right]$$

transforms T to the triangle T’ with vertices at (4,3), (4,10) and (-4,-3).

Find the coordinates of the points A, B and C

1. The matrix $A=\left[\begin{matrix}2&4\\-2&-5\end{matrix}\right]$ represents a transformation $T$. Given that $T$ maps point $P$ with coordinates (x,y) onto the point $P$’ with coordinates (6,10):
2. Find the coordinates of $P$

The matrix $B$ represents a transformation $U$. Given that the transformation $T$ followed by the transformation $U$ is equivalent to a reflection in the line $y=x$:

1. Find matrix $B$.