**7C Enlargements**

1. The matrix $M=\left[\begin{matrix}3&0\\0&2\end{matrix}\right]$.
2. Find the image $T^{'}$ of the triangle $T$ with vertices (1,1), (1,2) and (2,2) under the transformation represented by $M$.
3. Sketch $T$ and $T^{'}$ on the same set of coordinate axes.

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1. Describe geometrically the transformation represented by $M$.

**Key note:**

The determinant and scale factors:

1. The Matrix $M=\left[\begin{matrix}2&0\\0&4\end{matrix}\right]$.
2. Describe fully the transformation represented by matrix $M$
3. A triangle $T$ has vertices at (1,0), (4,0) and (4,2). Find the area of the triangle
4. Triangle $T$ is transformed by using matrix $M$. Find the area of the image of $T$.