

Fill in the Blanks

Enlargements and Stretches

Triangle ABC has coordinates A(1, 0) B(5, 0) C(4, 6) and area 12 square units

Matrix	Description of Transformation	Area Scale Factor	A'	B'	C'	Area of A'B'C'
$\begin{pmatrix} 3 & 0 \\ 0 & 1 \end{pmatrix}$	Stretch parallel to the x -axis with scale factor 3	3	(3, 0)	(15, 0)	(12, 6)	36
$\begin{pmatrix} 1 & 0 \\ 0 & 5 \end{pmatrix}$		5	(1, 0)			
	Enlargement about (0, 0) with scale factor 2					
$\begin{pmatrix} 4 & 0 \\ 0 & 2 \end{pmatrix}$						
$\begin{pmatrix} -3 & 0 \\ 0 & -3 \end{pmatrix}$		9				
			(1, 0)	(5, 0)	(4, -3)	
			(2, 0)	(10, 0)	(8, -18)	
$\begin{pmatrix} -1 & 0 \\ 0 & 2.5 \end{pmatrix}$						