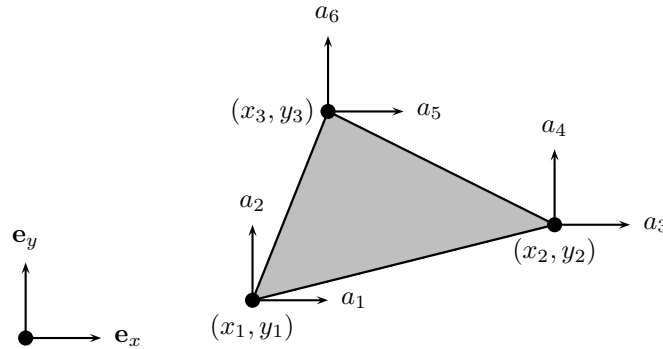


Purpose:

Compute the mass matrix for a triangular 3 node element.

**Syntax:**

$\mathbf{Me} = \text{plan3gm}(\text{ec}, \text{t}, \text{rho})$

Description:

plan3gm provides the element mass matrix \mathbf{Me} for a triangular 3 node element. The element nodal coordinates x_1, y_1, x_2 etc. in the undeformed configuration are supplied to the function by ec

$$\text{ec} = \begin{bmatrix} x_1 & x_2 & x_3 \\ y_1 & y_2 & y_3 \end{bmatrix}$$

The element thickness t is supplied by t , and rho is the mass density in the reference undeformed configuration.