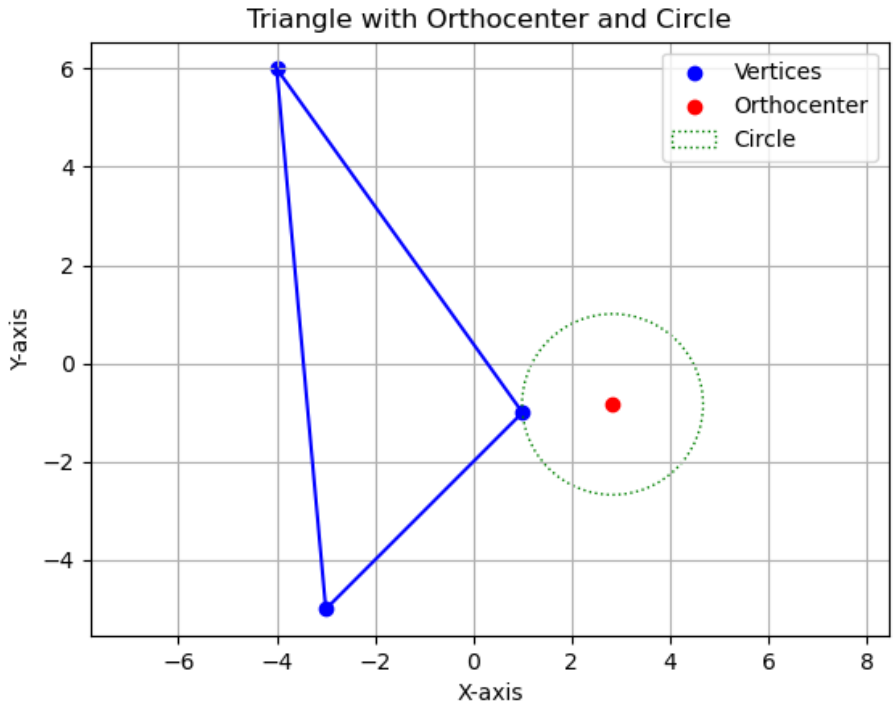

Draw the circle with centre at **O** and radius
R = OA
This is known as the circumradius
Solution:
Let AD, BE, CF are altitudes of triangle from vertices **A**, **B**, **C** respectively
The point of intersection of AD and BE is **O**;
Therefore,

$$\mathbf{O} = \begin{pmatrix} \frac{17}{6} \\ \frac{-5}{6} \end{pmatrix} \tag{1}$$

Radius of circle with centre **O**

$$R = OA = \frac{\sqrt{122}}{6} \tag{2}$$

Therefore;
The equation of circle is

$$\left(x - \frac{17}{6}\right)^2 + \left(y - \frac{-5}{6}\right)^2 = \left(\frac{\sqrt{122}}{6}\right)^2 \tag{3}$$