Solution with figure

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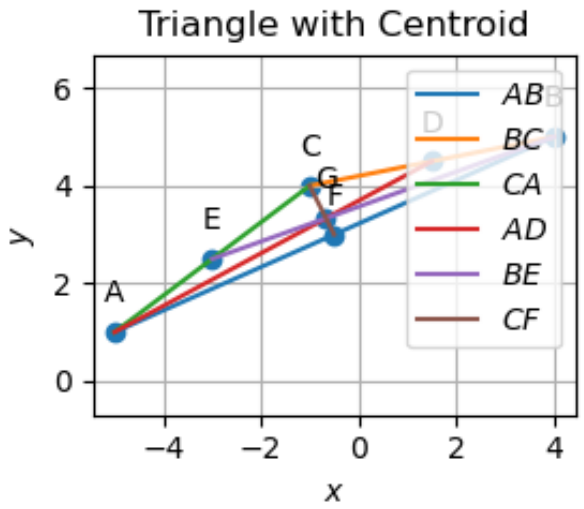

Fig. 0. Triangle

parameter	value	description
$\mathbf{m_1}$	$\begin{pmatrix}9\\4\end{pmatrix}$	AB
$\mathbf{m_2}$	$\begin{pmatrix}-5\\-1\end{pmatrix}$	BC
$\mathbf{m_3}$	$\begin{pmatrix}-4\\-3\end{pmatrix}$	AC
$\|\|B-A\|\|$	5.83	AB
$\|\|C-B\|\|$	6.40	BC
$\|\|A-C\|\|$	9.21	AC
rank	3	points are not collinear
$\mathbf{n_1^\top}$	$\begin{pmatrix}4 & -9\end{pmatrix}$	AB
c_1	-3	
$\mathbf{n_2^\top}$	$\begin{pmatrix}-1 & 5\end{pmatrix}$	BC
c_2	5	
$\mathbf{n_3^\top}$	$\begin{pmatrix}-3 & 4\end{pmatrix}$	AC
c_3	-39	
area	18.5	area of triangle
$\angle A$	12.90740°	Angle
$\angle B$	12.65255°	
$\angle C$	154.44003°	

TABLE 0
BISECTOR

parameter	value	description
D	$\begin{pmatrix}1.5\\-4.5\end{pmatrix}$	midpoint of line BC
E	$\begin{pmatrix}-3\\-2.5\end{pmatrix}$	midpoint of line AC
F	$\begin{pmatrix}-0.5\\3\end{pmatrix}$	midpoint of line AB
$\mathbf{n_4^\top}$	$\begin{pmatrix}3.5 & -6.5\end{pmatrix}$	AD
c_4	18	
$\mathbf{n_5^\top}$	$\begin{pmatrix}-2.5 & 7\end{pmatrix}$	BE
c_5	4	
$\mathbf{n_6^\top}$	$\begin{pmatrix}-1 & -0.5\end{pmatrix}$	CF
c_6	-22	
G	$\begin{pmatrix}-0.6666666666666675\\3.33333333333\end{pmatrix}$	centroid of triangle

TABLE 0
BISECTOR

parameter	value	description
$\mathbf{n_7^\top}$	$\begin{pmatrix}-5 & -1\end{pmatrix}$	AD_1
c_7	-9	
$\mathbf{n_8^\top}$	$\begin{pmatrix}-4 & -3\end{pmatrix}$	BE_1
c_8	9	
$\mathbf{n_9^\top}$	$\begin{pmatrix}9 & 4\end{pmatrix}$	CF_1
c_9	0	
H	$\begin{pmatrix}-9.36\\22.81\end{pmatrix}$	orthocentre of triangle

TABLE 0
BISECTOR

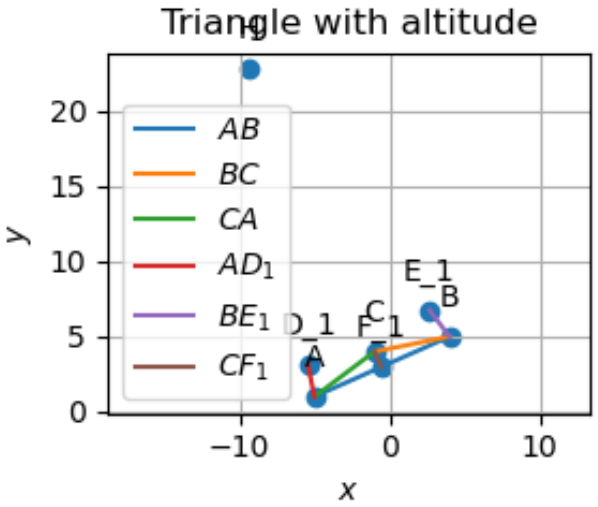

Fig. 0. Triangle

parameter	value	description
$\mathbf{n_{10}^\top}$	$\begin{pmatrix}9 & 4\end{pmatrix}$	Perpendicular bisector of AB
c_{10}	22	
$\mathbf{n_{11}^\top}$	$\begin{pmatrix}-5 & -1\end{pmatrix}$	Perpendicular bisector of BC
c_{11}	-16.5	
$\mathbf{n_{12}^\top}$	$\begin{pmatrix}-4 & -3\end{pmatrix}$	Perpendicular bisector of CA
c_{12}	-5.5	
O	$\begin{pmatrix}3.681\\-6.409\end{pmatrix}$	Circumcircle
radius	4.65	

TABLE 0
BISECTOR

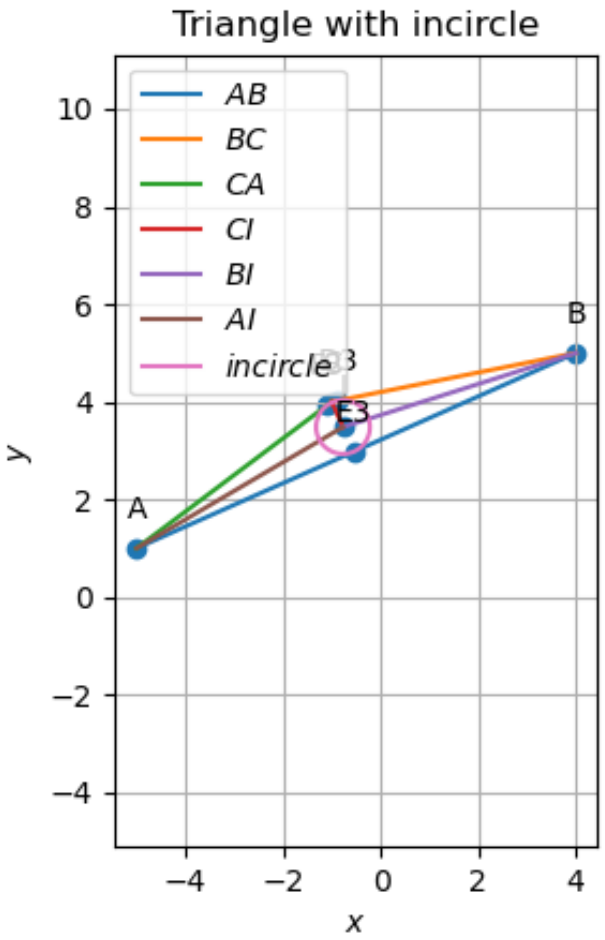

Fig. 0. Triangle

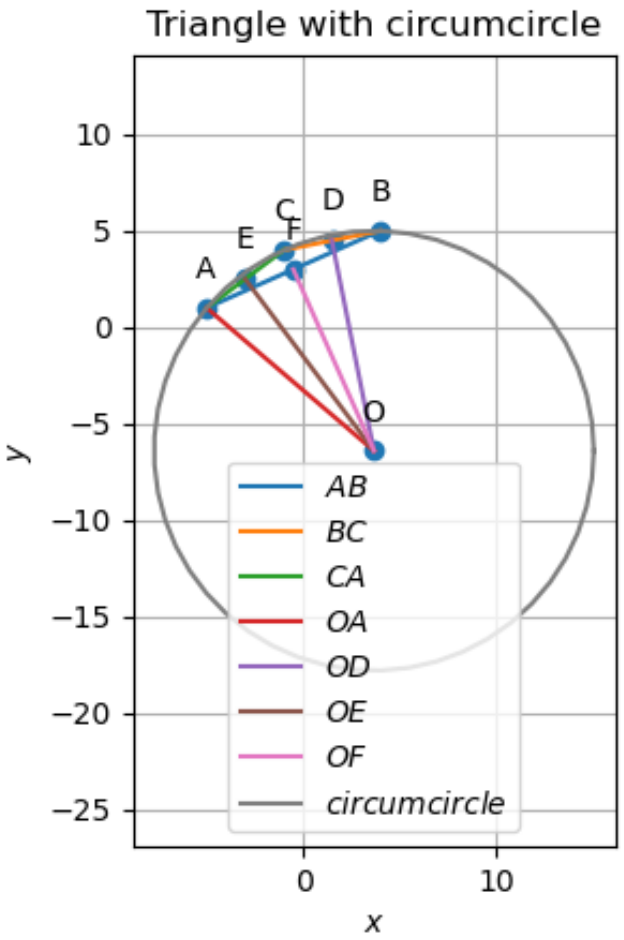

Fig. 0. Triangle