Answer on Question #54344-Physics-Mechanics-Kinematics-Dynamics

Vector A has magnitude of 13.9 and is 225° counter-clockwise up from the x-axis. What are the x- and y-components of the vector?

Solution

The x- and y-components of the vector are

$$A_x = A \cos \theta = 13.9 \ \cos 225° = -9.83,$$

$$A_y = A \sin \theta = 13.9 \sin 225° = -9.83.$$

Answer: $-9.83, -9.83$.