

3. The  $x$  component of  $\vec{a}$  is given by  $a_x = 7.3 \cos 250^\circ = -2.5$  and the  $y$  component is given by  $a_y = 7.3 \sin 250^\circ = -6.9$ . In considering the variety of ways to compute these, we note that the vector is  $70^\circ$  below the  $-x$  axis, so the components could also have been found from  $a_x = -7.3 \cos 70^\circ$  and  $a_y = -7.3 \sin 70^\circ$ . In a similar vein, we note that the vector is  $20^\circ$  from the  $-y$  axis, so one could use  $a_x = -7.3 \sin 20^\circ$  and  $a_y = -7.3 \cos 20^\circ$  to achieve the same results.