

1. For a particle traveling in a plane we have $\vec{v}(4) = \langle 7, -3 \rangle$ and $\vec{a}(4) = \langle 5, 0 \rangle$. At time $t = 4$, is the particle
 - (a) turning right, turning left, or not turning?
 - (b) speeding up, slowing down, or neither?
2. Repeat Exercise 1 for the later time $t = 9$, given that $\vec{v}(9) = \langle 3, 4 \rangle$ and $\vec{a}(9) = \langle -8, 6 \rangle$.