



A particle moves along the x-axis with velocity as shown in the graph above. Its position, $x(t)$, at $t = 0$ is 5.

- At $t = 0$, is the particle moving left or right? Justify your answer.
- When is the particle at rest?
- When does the particle change direction?
- When is the particle's speed the greatest?
- What is the acceleration of the particle at $t = 1$?
- When is acceleration zero?
- What is the total distance traveled from $t = 0$ until $t = 15$?
- What is the particle's position at $t = 15$?
- When does the particle reach its maximum position?
- What is the particle's minimum position?