MATH 131, Fall 2019   Name: _____
Quiz 7
10/31/19   Section:_____

For full credit you must present a clearly organized solution, showing all supporting calculations.

1. A particle moves along a line according to the position function $s(t) = (t^2 - 4t)^2$, where s is in meters and t is in seconds.

(a) Find the particle's maximum and minimum displacements from its original position in the first five seconds, and indicate all times t, $0 \leq t \leq 5$, where it achieves these displacements.

(b) Find the *total distance* traveled by the particle in the first five seconds.