Read each problem very carefully before starting to solve it. Each problem is worth 5 points. It is necessary to show all your work. Correct answers without explanations are worth 0 points. GOOD LUCK!!

1. An object in linear motion is located at position $s(t)=\sqrt{17-4 t}$ meters from the origin at time $t$ in seconds.
(a) Find the average velocity of the object between $t=2$ and $t=4$ seconds.
(b) Find the instantaneous velocity of the object at $t=4$ seconds.
2. Find an equation for the tangent line to the graph of $f(x)=x^{4}-x^{2}$ at $x=-2$.

