Quiz B: $\qquad$

Use the following parametric curves to answer each question
$x=t^{2}+3 t, y=t^{2}-5 t+6$

1. Find $\frac{d^{2} y}{d x^{2}}$
2. Find the leftmost point on the parametric curve from $-2 \leq t \leq 0$
3. Find the points on the curve where the tangent is horizontal or vertical.
4. Find the length of the arc on the following interval $0 \leq t \leq 2$
