$\qquad$

1. The graph $y=f^{\prime}(x)$ of the derivative of a function $f(x)$ is shown. Answer the questions about $f(x)$.

(a) Find the intervals on which $f(x)$ is concave up.
(b) Find the intervals on which $f(x)$ is concave down.
(c) State the $x$ values at which any inflection points occur.
2. Use the second derivative test to find and identify all local extrema of $f(x)=x^{3}-3 x$.
