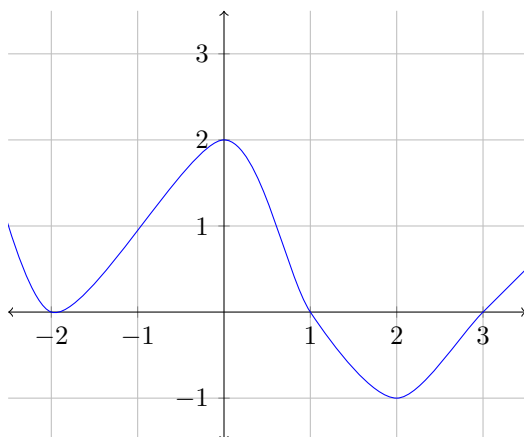


Please show **all** your work! Answers without supporting work will not be given credit.
Write answers in spaces provided.

Name: _____

1. Given the graph of $f'(x)$ below, answer the following question for $f(x)$.



- (a) [1 pt] **Critical Number(s):**
- (b) [1 pt] **Increasing Interval(s):**
- (c) [1 pt] **Decreasing Interval(s):**
- (d) [1 pt] **Relative Maximum Occurs at**
 $x =$
- (e) [1 pt] **Relative Minimum Occurs at**
 $x =$
- (f) [1 pt] **Concave Up Interval(s):**
- (g) [1 pt] **Concave Down Interval(s):**
- (h) [1 pt] **Inflection Point(s) Occurs at**
 $x =$

2. [4 pts] Find the x -coordinate for the absolute max. of $f(x) = -x^3 + 12x = 0$ over the interval $[-3, 5]$.

$x =$ _____