

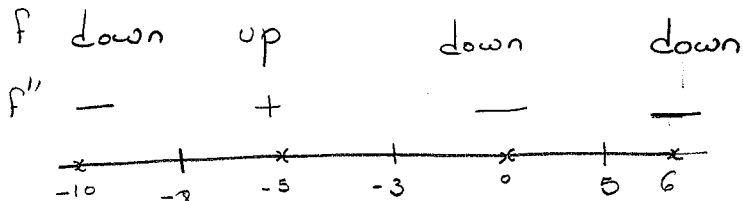
Quiz 7

Name:

Section:

Please box or circle your final answers.

1. Find where $f(x)$ is concave up/down when $f''(x) = \frac{-2(x+3)(x+8)}{(x-5)^2}$.



$(-\infty, -8)$ C. down $(-8, -3)$ C. up $(3, \infty)$ C. down

2. Use the information below to sketch the graph of $f(x)$:
vertical asymptote at $x = -1$

- $f(-3) = 4$
- $f(0) = 0$
- $f(1) = -4$
- $f(2) = 0$
- $f(3) = 4$
- $\lim_{x \rightarrow \infty} f(x) = 1$
- increasing on $(-3, -1), (1, 3)$
- decreasing on $(-\infty, -3), (-1, 1), (3, \infty)$
- concave up on $(-\infty, -1), (-1, 0), (2, \infty)$
- concave down on $(0, 2)$

