

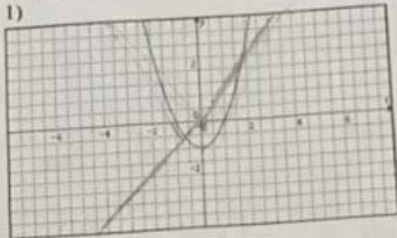


Applying the First Derivative Test
By: Lucy Solís



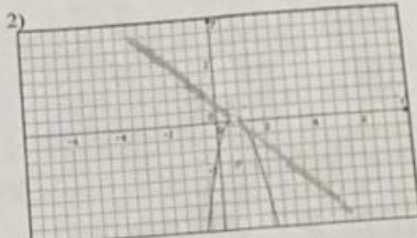
Name Angel Guevara-A01570255 Group _____ Date 1

1. Use the graph to find the intervals in which the graph of $f(x)$ is increasing or decreasing and sketch the derivative



1) $f(x)$ is increasing: $(0, \infty)$

$f(x)$ is decreasing: $(-\infty, 0)$



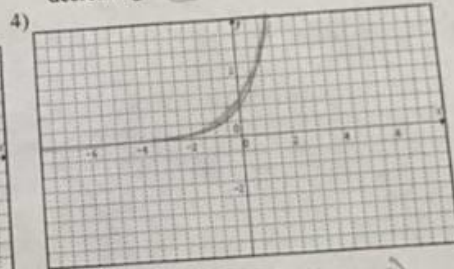
2) $f(x)$ is increasing: $(-\infty, -0.75)$

$f(x)$ is decreasing: $(-0.75, \infty)$



3) $f(x)$ is increasing: $(-\infty, -2) (-1, 1) (2, \infty)$

$f(x)$ is decreasing: $(-2, -1) (1, 2)$

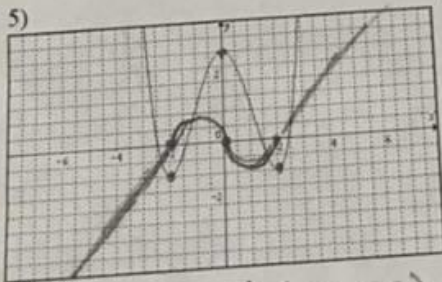


4) $f(x)$ is increasing: $(-\infty, \infty)$

$f(x)$ is decreasing: —

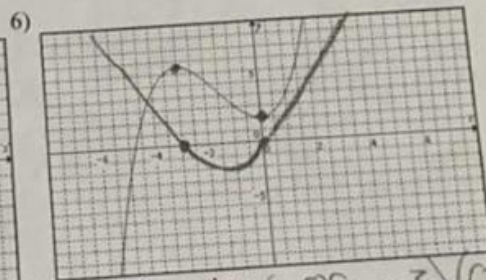
Some e^x
 $f'(x) = e^x$

decreasing



5) $f(x)$ is increasing: $(-2, 0) (2, \infty)$

$f(x)$ is decreasing: $(-\infty, -2) (0, 2)$



6) $f(x)$ is increasing: $(-\infty, -3) (0, \infty)$

$f(x)$ is decreasing: $(-3, 0)$