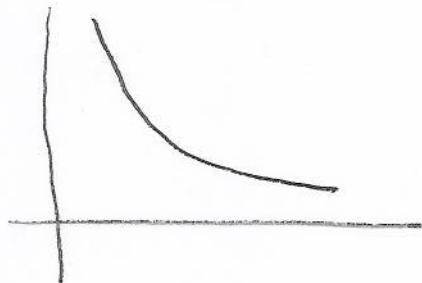


Mathematics 122 Quiz 3 Name: _____

(1) Draw a graph that is decreasing and concave up.

1 pt



2 pts

(2) A rock is dropped off the side of a building. After t seconds it has traveled $16t^2$ feet. What is the average speed between $t = 1$ and $t = 3$ seconds?

$$\frac{\Delta d_{\text{ft}}}{\Delta t} = \frac{16(3)^2 - 16(1)^2}{3 - 1}$$

$$= 64 \text{ ft/sec}$$

$$\underline{64 \text{ ft/sec}}$$

2 pts

(3) The function $f(t)$ is given by

t	0	2	4
$f(t)$	5	8	15

Is this concave up, concave down, or neither? concave up

