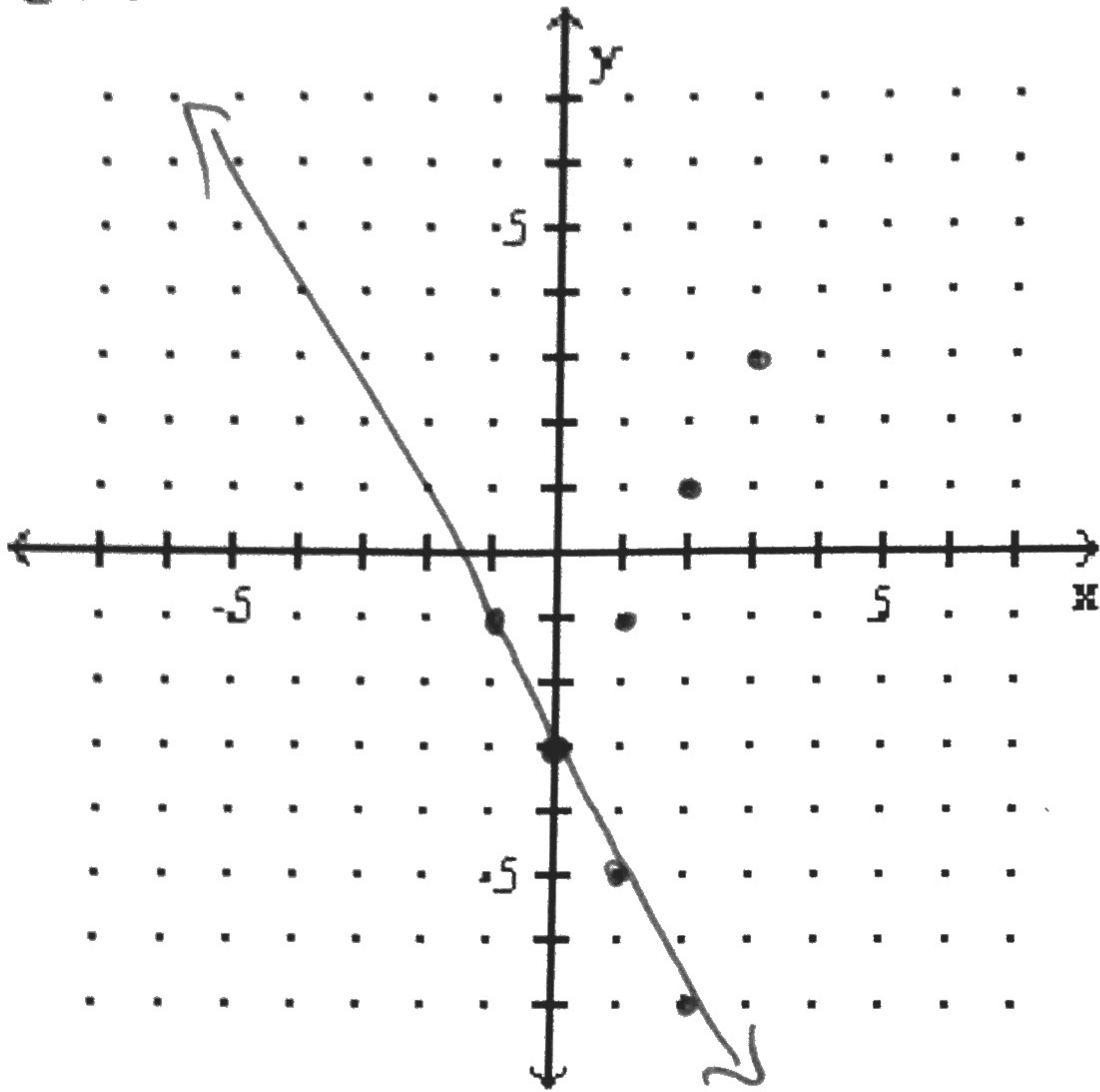


Graph each function then determine whether it is increasing, decreasing, or constant.

$$g(x) = -2x - 3$$



Determine whether the given function is linear or nonlinear. If it is linear, determine the equation of the line.

	x	y = f(x)
$\frac{10}{5}$	5	10
$\frac{5}{5}$	10	20
$\frac{5}{5}$	15	30
$\frac{5}{5}$	20	40

$y = mx + b$
 $10 = 5(2) + b$
 $\frac{y - y_1}{x - x_1} = \frac{y_2 - y_1}{x_2 - x_1}$
 $10 = 10 + b$
 $b = 0$

x	y = f(x)
2	-5
4	7
6	27
8	55
10	91

$\frac{7 - (-5)}{4 - 2} = \frac{12}{2} = 6$
 $\frac{27 - 7}{6 - 4} = \frac{20}{2} = 10$

$$y = 2x + 0$$

non-linear