7) Given the following graph

a) Find f(2) $= -3$

b) The domain
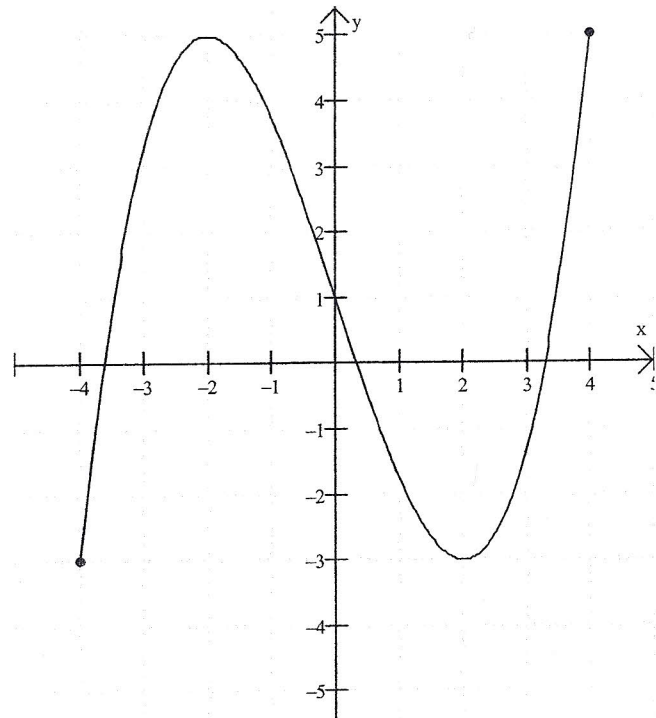
$[-4, 4]$ OR $-4 \le x \le 4$

c) All x values such that f(x) = 5

$-2, 4$

d) The range
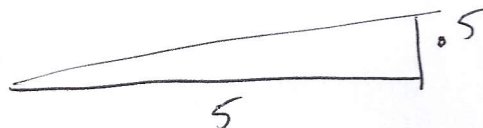
$[-3, 5]$

OR $-3 \le y \le 5$

8) If 4x + 2y − 16 = 0 then the slope is ___-2___ and the y-intercept is ___8___.

$2y = 16 - 4x$

$y = 8 - 2x$

9) Find the slope of the line containing (-3, 4) and (1, 2)

$$m = \frac{y_2 - y_1}{x_2 - x_1} = \frac{2 - 4}{1 - -3} = \frac{-2}{4} = \frac{-1}{2}$$

10) A treadmill is 5 feet long is set to mimic an incline. Then end is 0.5 feet higher than the beginning. What is the slope (grade) of the treadmill?

$$m = \frac{rise}{run} = \frac{.5}{5} = \frac{1}{10}$$

or 10% grade