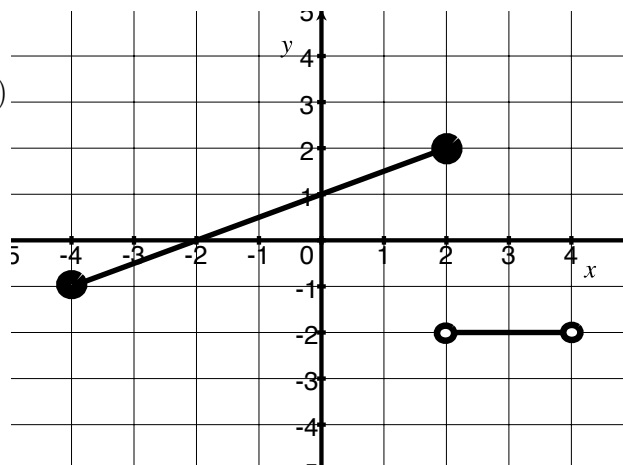


# Quiz 1

Show *all* your work. No credit is given without reasonable supporting work. There are *two* sides to this quiz.

1. Let  $f$  be the graph below and to the right.

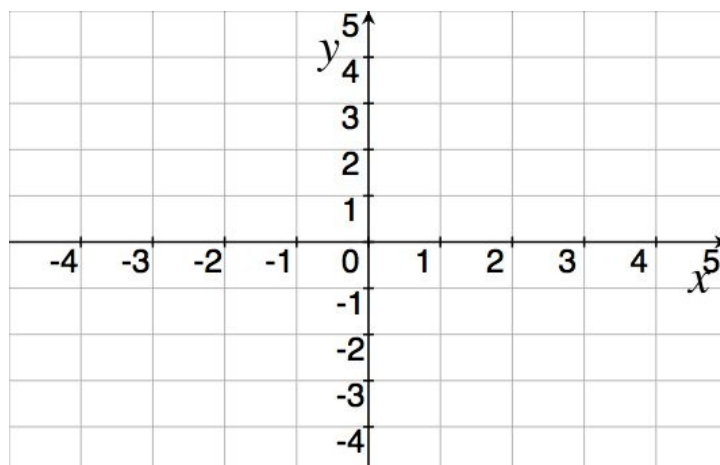
(a) [1] (WebHW3 #16) Find  $f(3)$



(b) [1] (§1.1 #44) What is the  $y$ -intercept?

2. [2] (GraphWks #4 & WebHW3 #19) Plot two points that are on the graph of

$$\begin{cases} 1 & \text{if } x < 2 \\ -2x & \text{if } 2 \leq x \end{cases}$$



3. [2] (WebHW1 #7) Add and subtract as indicated  $\frac{-x}{x+22} - \frac{x+22}{x}$

4. [3] (FractionWks#2) You have 8 oz of mocha that is 25% espresso sitting in a 16 oz cup. Write a rational expression in  $x$  whose values give the percentage (in decimal form) or espresso in the cup when  $x$  oz of espresso are added to it.