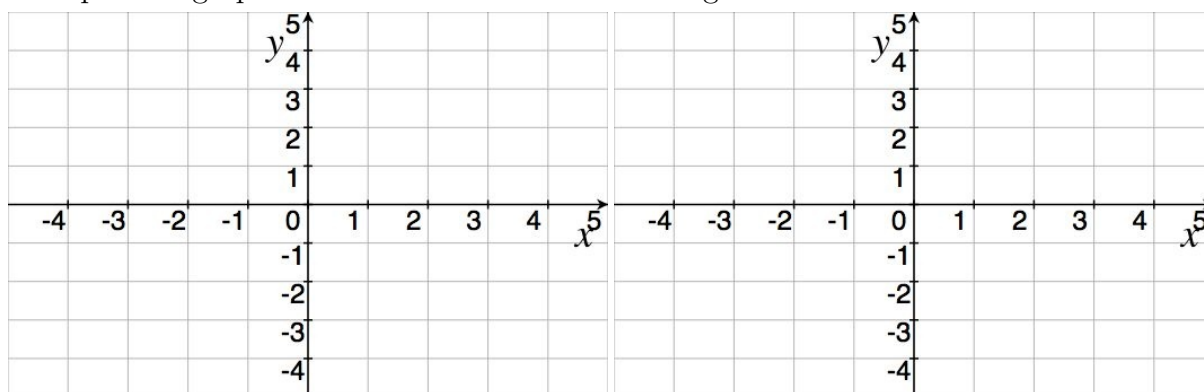


Precalculus Review

1. Recall the definition of a function. (If you cannot remember the definition of a function consult page 2 of your text.)

(a) Draw an example of a graph that *is* a function on the set of left axis and an example of a graph that is *not* a function on the right axis.



(b) Label the function whose graph on the left f . What is the domain of f ?

(c) If -2 is in the domain of f , estimate $f(-2)$.

(d) Is there an x so that $f(x) = 2$? If so, estimate what it is.

2. Recall linear functions. (If you cannot remember consult §1.2 of your text.)

(a) Find the slope of a line that passes through the points $(-2, 1)$ and $(2, 3)$.

(b) Find the equation of the line that passes through the points $(-2, 1)$ and $(2, 3)$.

3. Consider a company that makes radios.

- (a) Explain what fixed, variable, and total costs are.

- (b) The machinery needed to make radios costs \$24,000 and each radio uses \$7 of supplies. Write down the total cost of making q radios.

- (c) Let the cost function be denoted with C . Find $C(500)$.

- (d) Explain the statement $C(100) = 24,700$ in terms of costs and radios.

- (e) Explain what the revenue of a company is. (You may want to consult page 23 of your text if this doesn't sound familiar).

- (f) If the radios sell for \$15 each, what is the revenue of the company if it sells all q radios made?

- (g) How much profit would be made if the company produces q radios?

You can verify your answers by reading the examples on page 22, 23, 24, & 25 of your text.