20 Linear Functions

Due:
12/13/2015 at 06:00am EST.

Students will be able to:

- Identify the graph of linear functions
- Find the slope and y-intercept of a graph of a linear function
- Find an equation of a linear function given the slope and y-intercept

Functions and symbols that WeBWorK understands.

Links to some useful WeBWorK pages for students

1. (1 pt)

Match each function with its graph A-F. The constants k and s are the same in each function.

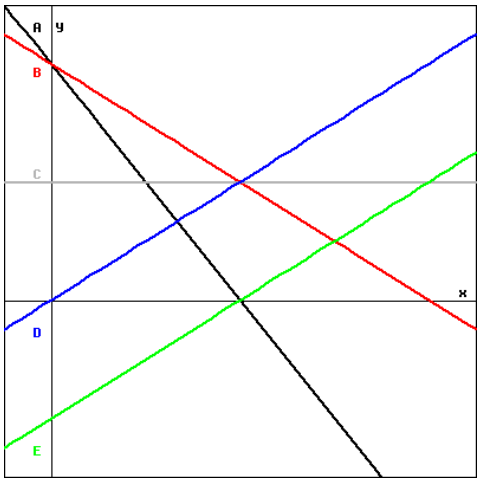
? $f(x) = 2s - kx$

? $f(x) = kx - s$

? $f(x) = kx$

? $f(x) = 2s - 2kx$

? $f(x) = s$



(Click on graph to enlarge)

2. (1 pt) Give the slope and y -intercept for the graph of the function $f(x) = \frac{x}{5} - 4$.

The slope is _____

The y -intercept is _____

3. (1 pt) Give the slope and y -intercept for the graph of the function $f(x) = 15 - 3(2 - 2x)$.

The slope is _____

The y -intercept is _____

4. (1 pt) Give the slope and y-intercept for the graph of the function $f(x) = 254 - 8x$.

The slope is _____

The y-intercept is _____

5. (1 pt) Decide whether the following function is linear or not:

$$g(w) = -\frac{3 - 16w}{7}$$

If so write the equation in **slope-intercept** form, $g(w) = mw + b$, and enter the values for m and b in the blanks below. If the expression is not linear, write **none** in both blanks.

$m =$ _____

$b =$ _____

6. (1 pt) Find an equation for the linear function which has y-intercept 8 and x-intercept 11.

$f(x) =$ _____