

# Written Homework Section 3.1

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Name: \_\_\_\_\_

Due: \_\_\_\_\_

In Problems 13–20, a linear function is given.

- (a) Determine the slope and y-intercept of each function.
- (b) Use the slope and y-intercept to graph the linear function.
- (c) Determine the average rate of change of each function.

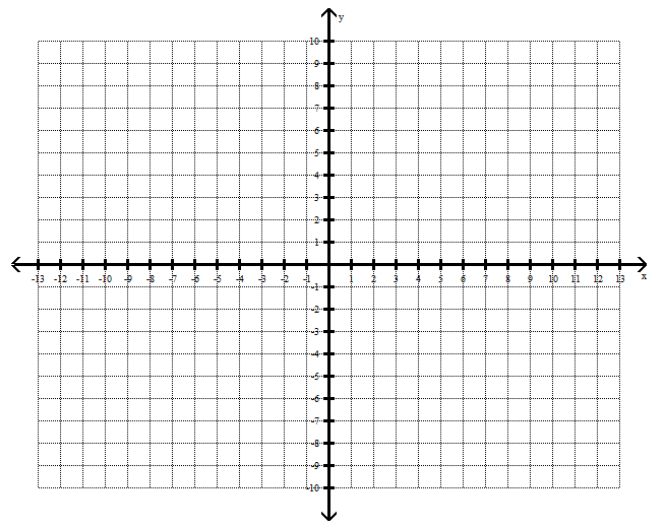
18.  $h(x) = -\frac{2}{3}x + 4$

Answer(a): Slope=

Answer(a): y-intercept=

Answer(c): Average Rate of Change=

(b.)



30. Suppose that  $f(x) = 3x + 5$  and  $g(x) = -2x + 15$ .

- (a) Solve  $f(x) = 0$ .
- (b) Solve  $f(x) < 0$ .
- (c) Solve  $f(x) = g(x)$ .
- (d) Solve  $f(x) \geq g(x)$ .
- (e) Graph  $y = f(x)$  and  $y = g(x)$  and label the point that represents the solution to the equation  $f(x) = g(x)$ .

Answer(a): \_\_\_\_\_

Answer(b): \_\_\_\_\_

Answer(c): \_\_\_\_\_

Answer(d): \_\_\_\_\_

