

# CHAPTER 4

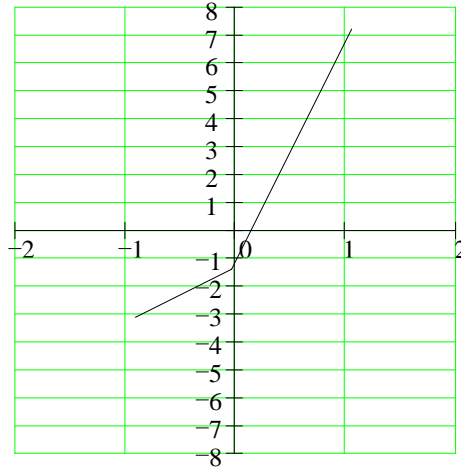
## Systems of Linear Equations

### 4.1 Slope and Rate of Change

Note: In this section,  $m$  will always refer to slope and  $b$  will refer to the constant term (or initial value).

- 1) All represent linear relationships.
- 3)
  - a) Answers will vary.
  - b)  $m = 0.2$
  - c) Answers will vary.
  - d) The slopes between all these points are equal.
- 5)

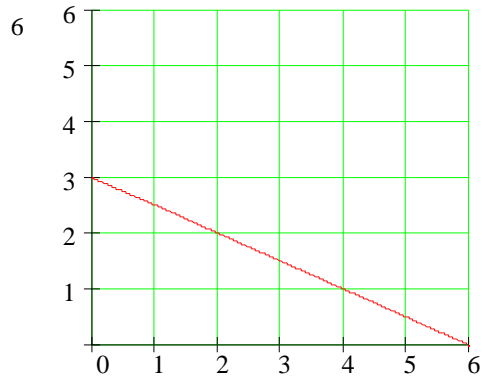
a)



- b) No.
- c)
  1.  $m = 2$
  2.  $m = 8$
- d) Yes. The slopes are not the same.

7)

a)



b) (2, 2)

c) (-2, 4)

d) Yes. The slopes are equal.

9)

a)  $m = \frac{7}{11} \approx 0.64$

b) 9 in

c) 12.5 in

11)

a) \$1000

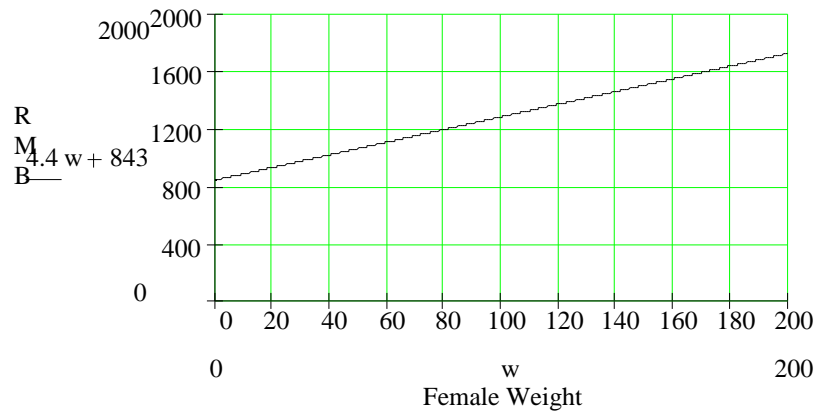
13)

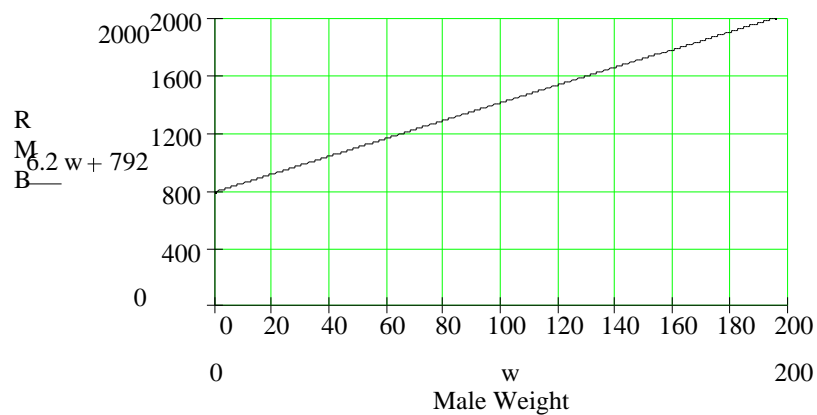
a) Density of Superlight =  $m = 1.09$

b) The company lied.

15)

a)





- b) Female BMR = 4.4  
Male BMR = 6.2
- 17) 68
- 19)  $r = \frac{11}{12}$  cm