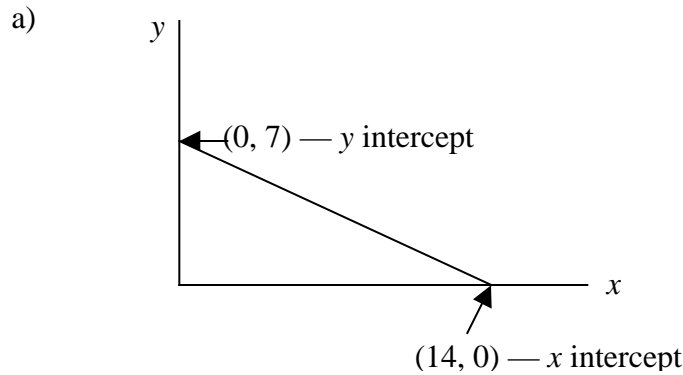


## 4.2 Forms for Linear Equations

3)

- a)  $m = 0.36$       y-intercept:  $(0, 0.1)$
- b)  $m = 2$           y-intercept:  $(0, \frac{14}{3})$
- c)  $m = -\frac{1}{4}$         y-intercept:  $(0, \frac{7}{4})$

5)



- b)  $m = -\frac{1}{2}$
- c)  $y = -\frac{1}{2}x + 7$

7)  $y = \frac{3}{5}x + 4$

9)  $y = -\frac{1}{3}x + \frac{23}{3}$

11)

- a)  $y = 3500$  ft
- b)  $y$  will decrease by 22 feet
- c)  $y = 3500 - 22x$

13)

a)

Hour of Day	Elapsed hrs since 2 pm	Temperature (°F)
2:00 PM	0	87
3:00 PM	1	85.5
4:00 PM	2	84
5:00 PM	3	82.5
6:00 PM	4	81
7:00 PM	5	79.5
8:00 PM	6	78
9:00 PM	7	76.5
10:00 PM	8	75
11:00 PM	9	73.5
12:00 AM	10	72
1:00 AM	11	70.5
2:00 AM	12	69
3:00 AM	13	67.5
4:00 AM	14	66

- b)  $F = -1.5t + 87$  for  $0 \leq t \leq 14$
- c/d) High temperature occurs at 2 PM ( $t = 0$ ).  
High temperature =  $87^\circ\text{F}$   
Low temperature occurs at 4 AM ( $t = 14$ ).  
Low temperature =  $66^\circ\text{F}$

- 17) 0  
19) 0