

## LESSON 26 ANSWERS .....

1.
  - a.  $m = 1.5$  and  $b = 8$ , so  $y = 1.5x + 8$ .
  - b. When  $x = 20$ ,  $y = 38$ . It will cost \$38.
  - c. When  $y = 29$ ,  $x = 14$ . It traveled 14 miles.
2.
  - a.  $m = -9$  and  $b = 360$ , so  $y = -9x + 360$ .
  - b. When  $x = 15$ ,  $y = 225$ . There will be 225 gallons.
  - c. When  $y = 0$ ,  $x = 40$ . It will take 40 minutes.
3.
  - a.  $m = 2.5$  and  $b = 7$ , so  $y = 2.5x + 7$ .
  - b. When  $x = 12$ ,  $y = 37$ . It will cost \$37.
  - c. When  $y = 62$ ,  $x = 22$ . You can order 22 magazines.
4.
  - a.  $m = -30$  and  $b = 750$ , so  $y = -30x + 750$ .
  - b. When  $x = 6$ ,  $y = 570$ . It is 570 feet above sea level.
  - c. When  $y = 0$ ,  $x = 25$ . It will take 25 hours.
5.
  - a.  $m = -1200$  and  $b = 32000$ , so  $y = -1200x + 32000$ .
  - b. When  $x = 10$ ,  $y = 20000$ . It is 20,000 feet above ...
  - c. When  $y = 26000$ ,  $x = 5$ . It will take 5 minutes.
6.
  - a.  $m = 6700 - 1200 = 5500$  and  $b = 2800$ ,  
so  $y = 5500x + 2800$ .
  - b. When  $x = 3$ ,  $y = 19300$ . It will be \$19,300.
  - c. Solve  $5500x + 2800 = 50000$ , and you get  $x = 8.58...$   
It will take 9 months.