12.1   – The amount of money Melissa spent.

        – The amount of money Jocelyn spent.

        – Jocelyn: \$45, Melissa: \$22.50, Stephanie: \$135

12.4 $f(x) = 7x + 2$, $n = 22$

13.2   D

14.4   D

15.1 $h = -\frac{3}{2}t + 14$

15.5   a) 8 m/s

       b) 60/11 m/s

27.2   a) 2/5

       b) 1/5

       c) 0

       d) 160

       e) yes, it's possible.

28.4   – $P(M) = 140/250 = 14/25$

       – $P(U) = 60/250 = 6/25$

       – $P(M|U) = 40/60 = 2/3$

       – $P(D|F) = 90/110 = 9/11$

       – $P(U|M) = 40/140 = 4/14$

29.2   – This method of sampling is likely to be biased because you will get responses from mostly people from that fraternity. Their opinion is most likely against having to pay the large fee, and this may not reflect the opinion of all undergraduate students.

       – Split the population into Freshmen, Sophomores, Juniors, Seniors, then do a simple random sample in each group.

30.3   C

33.2   – 210

       – 120