27.2 19 : 8

28.1   – From top to bottom: 11/51, 40/51, 12/51, 39/51

   – On first step from top to bottom: 0.7, 0.3
      On second step from top to bottom (including the ones already given): 0.6, 0.4, 0.8, 0.2

   (a) 0.28
   (b) 0.06

28.2 Ask me if you have trouble with tree diagram.
   $P(\text{first spin is an even number}) = 3/4$
   $P(\text{the sum of the two spins is 9}) = 3/8$
   $P(\text{first spin even } or \text{ sum=9}) = 3/4 + 3/8 - 1/4 = 7/8$

28.3 (a) $P(\text{red cover } and \text{ fiction}) = 0.08$

   (b) $P(\text{red cover } or \text{ fiction}) = 0.2 + 0.4 - 0.08 = 0.52$

28.4 (a) $190/400 = 19/40$

   (b) $391/400$

   (c) $190/388 = 95/194$

   (d) $190/193$

29.2   – D. I and III only

   – (a) Voluntary. Sample may be biased, because people who have strong opinions one way or another is more likely to respond.
   (b) Stratified. Not biased, because we are doing a simple random sample within each grade level.

29.4 (a) measurement

   (b) categorical

   (c) categorical

   (d) amount of money spent on shopping trip.

30.1 (a) 75.6

   (b) 250 students

30.2 Ask me if you have trouble making stem-and-leaf plot

30.3 Median: 30.5, IQR= 15

30.4 63.3 lbs