- 0. Dr. Osborne's math test had 75 problems: 10 pre-algebra, 30 trigonometry, and 35 algebra. The average number of questions answered correctly was 70% of the pre-algebra, 40% of the trigonometry, and 60% of the algebra problems. Tina got the average score, but she did not get a 60% passing grade on the test. How many more problems would she have needed to answer correctly to earn a 60% passing grade?
- 1. Two standard dice are thrown, a red die and a blue die. If the sum of two dice is computed, what is the probability of getting a sum of 6 or 7?
- 2. In September of 2014, the value of one gram of gold is \$39.11. Each month following September, the value increases by 11%. If Sarah bought 9 grams of gold in September, how much will that gold be worth in the December of 2014?
- 3. Jenny recently got a new phone, and as a benefit to her new contract, she gets to choose her own phone number! How many different phone numbers can be made if the first digit of her 10 digit phone number cannot be 0 or 8?
- 4. How many different combinations of \$5 bills and \$2 bills can be used to make a total of \$27? (Order does not matter)
- 5. Sam's house has a rectangular driveway with an area of 18126 ft<sup>2</sup>. The residents of his neighborhood are required to have their driveway repainted every year. If the cost of paint for each square yard is 25 cents, what is the total amount of money in dollars that Sam pays for his driveway in 1 year?
- 6. There are 119 students on varsity math team, other than Tom and Jerry, and Tom and Jerry are not friends. Everyone is either biologists, physicists, or both. Tom has 72 friends and he is only friends with physicists. Jerry has 54 friends he is only friends with biologists. How many people are both physicists and biologists on math team, not including Tom and Jerry?
- 7. If a clock runs twice as fast as usual, how many times do the minute and hour hands of a clock coincide in 1 day?
- 8. Compute the sum  $214 + 215 + 216 + \ldots + 2012 + 2013 + 2014$ .