1. Nine cards in a pile are numbered 1 through 9. One card is drawn. The sum of the numbers on the remaining cards is determined. The units (or ones digit) of that sum is 8. What was the number on the drawn card?

2. A 51 foot piece of wire is cut into 3 sections so that the first section is three times as long as the second section and the second section is four times as long as the third. What is the length (in feet) of the longest section?

3. Jo’s parent gave her a $20 bill and a $10 bill to spend on bowling for she and her brother on a Thursday afternoon. Upon arriving at the bowling alley at 12:30 PM, they looked at the sign that had the bowling rates. See below for the sign.

   Monday - Friday before 5:00 pm  $3.25* per 15 minutes (for the lane) and $3.00* per person (for shoe rentals)
   Monday - Friday after 5:00 pm  $4.50* per 15 minutes (for the lane) and $3.00* per person (for shoe rentals)
   Saturday & Sunday  $4.50* per hour (for the lane) and $3.00* per person (for shoe rentals)

   *Price includes tax

   Jo and her brother each rented shoes. They rented only one lane (which they shared) for bowling. After paying for their bowling expenses, Jo received $4.50 in change. For how many minutes did they rent the bowling lane?

4. Tom practices his violin and Mondays and Wednesdays. On Tuesdays and Thursdays, he practices his trumpet. On Fridays and Saturdays, he practices his piano. On Sundays, he takes a break from practicing. If today is Saturday, March 10th, which instrument (if any) will he be practicing 109 days from now?

- PLEASE TURN OVER –
5. Triangle ABC is a right triangle. Points E, F, and G are midpoints of segments AB, BC, and AC, respectively. Segments AB, BC, and AC have lengths 10, 26, and 24 respectively. What is the area of parallelogram EFCG?

6. Nine basketball teams with a total of 104 players entered a tournament. If none of the teams can have more than 12 players, what is the greatest number of those teams that can have exactly 10 players?

7. At an elementary school, 22 fifth graders were in the school choir and 31 fifth graders were in the school band. If a total of 8 fifth graders belonged to both of the musical groups, how many students were in only one of the musical groups?
1. A librarian has 13 copies of the same book. If 5 books and a 29-ounce weight balance on a scale with 8 books and an 11-ounce weight, how many ounces is a single book?

2. A fair die in the shape of a dodecagon has 12 faces (flat surfaces in the shape of regular pentagons). Each face has one of the numbers from 1 through 12 on it. An example is shown below. If three of these dice are rolled, how many different sums could you have?

3. An equilateral triangle and a square both have perimeters of 21 centimeters. By how many centimeters is a side of the triangle longer than a side of the square?

4. Five counting numbers has a median of 13. If four of the five numbers are 8, 12, 13, 18, what must the fifth number be so that the mean of the five numbers is the same as the median?
5. A middle school tennis team had 21 players. The tennis coach opened 30 cans of tennis balls on the first day of practice for the team to use and placed the balls in a bin. Each can had 3 tennis balls. If each player took the same number of tennis balls from the bin, how many tennis balls would be left in the bin?

6. On his way out of the doctor’s office, Truman was allowed to pick 2 stickers from a basket of stickers containing 5 different types of stickers. He did NOT want to take two of the same type of stickers. How many different combinations of stickers did he have from which to choose?

7. After a boy climbed half way up to the top of the hill, he slid down one-third of the distance he had climbed. What fraction of the climb to the top did he have left?