1) D Farrah invited 3 friends in the first round of invitations. These 3 friends invited 3 more friends in the second round of invitations. This makes a total of three first-round invitations and 9 second-round invitations. Adding the first and second round invitations together, we get a total of 12 people invited by Farrah. Tiffany, on the other hand invited 2 friends who invited 4 friends each, applying the same concept, we can conclude that she invited a total of 10 friends. Since the question asks for the sum of the invited friends and the hostesses, the answer would be 12 + 10 + 1 + 1, which equals 24.

2) C of an hour is 40 minutes. Since they work together, they can finish setting up in half the time, which is 20 minutes. 20 minutes converted to seconds is 60(20) which is 1200 seconds.

3) D The only shape with angles that add up to 180 degrees is a triangle.

4) A 11 is the only 2-digit prime palindrome.

5) C Multiply the number of different possible choices to get the total number of combinations. 5\*3\*2 = 30

6) C Looking at the pattern, you are counting down by thirteen, therefore the next number in the sequence is 351 – 13 which is 338.

Ordering them from least to greatest, we get

4.5 feet (54 inches), 56 inches, 58 inches, feet (60 inches), 60 inches, feet (64 inches)

7) B The greatest height is feet

8) D The smallest height is 4.5 feet

9) D people have not been found. This is the equivalent of 75%

10) B Area = 12.5\* 12.5 = 156.25

Perimeter = 4(12.5) = 50

The positive difference is 156.25 – 50 = 106.25

11) A 3 + 10 + 4 + 6 + 6 + 1 + 2 + 8 = 40

40 ÷ 8 = 5

12) C Evaluate. 10² - [5(-3+12÷2+1)] + 23 using order of operations we get 103

13) B The boys buy one ice cream cone for $4 and buy a second cone for half off ($2). They also get the third for $4 and the fourth for $2. This is a total of $12, which split evenly into fourths is $3.

14) C When we multiply 6.3 2.71, we get 17.073. When we round this to the nearest tenth we get the answer, which is 17.1

15) D Nick is 1.75 yards= 1.75\*3=5.25 feet= 5.25\*12=63 inches tall. The branch is 6 feet= 72 inches high. 72 inches-63 inches=9 inches

16) C 4 and 6 are composite numbers greater than 2. This is a probability which reduces down to .

17) A Kathryn was found either first or second, and Doreen was found before Kathryn, so Doreen must have been found first.

18) D The least common multiple of 15, 40, and 60 is 120. Since they are found after the second sneeze, 120\*2=240 seconds

19) B The volume of the box is 72 feet cubed and the volume of Jamie is 8 feet cubed. This leaves 64 feet cubed for 1 foot cube pillows.

20) C Jamie is splitting 2014 mini M&Ms 8 ways. 2014 ÷ 7 = 287 R 5. Each person gets 287 M&Ms with 5 left over.

21) E The sum of Arya’s times after 5 rounds was 45 minutes and after 6 rounds is 48 minutes. The sums increased by 3.

22) C Theo only has to hide 6 times, because the round is over before he has to hide again. 46 ÷ 7 = 6 R 4

23) C If we convert the fractions to have the same denominator, = , =, and = , we can compare them. Soda, with its probability of = , has the greatest probability.

24) D Chamara has played 16 rounds. Jason has played (16) + 2 rounds, or 14 rounds, adding these two together, we get a total of 30 rounds.

25) D Jamie G. is famous for being inseparable from his blue jacket (hinted in questions 5, 7/8, 9 and 14) and Jessie is our beloved MAO president (hinted in questions 4, 9, and 11).