Logic and Maths Puzzles 59 June 2017

1. What is the sum of the numbers on the balls in a Kelly pool set?

2. Mary, Jo and Beth are the Number 1, Number 2 and anchor of their three-woman tug-of-war team, not necessarily in order. Number 1 is the youngest, and lives alone. Beth, who shares a flat with Mary, is older than Number 2. What position does each woman occupy on the team?

3. A suspect was questioned in a case he was being accused of. He was asked by the court if his statements were true, and he replied...
"I guarantee that it is untenable to deny the opposite of the veracity of my affirmations."
Is the suspect telling the court the truth or is he lying?

4. If you listed all seven Roman numerals from highest to lowest in value, what year would that represent?

5. According to the song, how many articles did "*my true love give to me*" over the entire 12 days of Christmas?

6. If you had one of each denomination of Australian currency, how much money would you have?

7. What whole number is the cube root of 1331?

8. I have some pencils and some jars.
If I put five pencils in each jar, I have two empty jars left over.
If I put four pencils in each jar I have one pencil left over.
How many pencils and how many jars do I have?

9. A man decides to have a day out and get fit at the same time by setting off from home on a bike. He rides toward his intended destination at 9 km per hour. However, during the ride he sustains a puncture which he instantly realises he cannot repair, so he wheels the bike home at 3 km per hour.
Given that he was away from home for eight hours, how far in km did he get before he had to return?

10. A. The number of false statements here is one.
    B. The number of false statements here is two.
    C. The number of false statements here is three.
    D. The number of false statements here is four.

Which of the above statements is true: A, B, C or D?

Solutions:

1. 120

2. Jo is Number 1, Mary is Number 2, Beth is Anchor

3. He's lying.
"To deny the opposite of the veracity" = to deny falsehood = to affirm the truth
"I guarantee that it is untenable" = it cannot be maintained

4. MDCLXVI = 1666

5. 364

6. $188.85 ($100 + $50 + $10 + $5 + $2 + $1 + 50c + 20c + 10c + 5c)

7. 11

8. 45 pencils, 11 jars

9. 18 km

10. C