1. Mrs. Langtree was tutoring two of her students, Richard and Selina, after school. When she noticed that her yardstick was missing she knew that one of them had taken it. She also knew that one of them always told the truth and the other always lied but couldn’t remember who lied and who told the truth. She asked the students who had taken her yardstick and got these replies:
   Based on this information can she determine who told the truth and who took the yardstick?

2. Cody has five students in his class and each of them always tells the truth or always lies. Cody, frustrated, asks, ”Isn’t there anyone who won’t lie to me?” He gets these replies:
   Alicia: None of us are truth-tellers or all of us are truth-tellers.
   Brandin: Exactly one of us is a truth-teller.
   Candyce: Exactly two of us are truth-tellers.
   Denice: Exactly three of us are truth-tellers.
   Emily: Exactly four of us are truth-tellers.
   Who are the liars?

3. In the land of Logicia, every citizen is either a truth-teller or a liar. One day Juanita encounters four citizens sitting together on a park bench. In an attempt to start a conversation she asks, ”Which of you are truth-tellers?” They reply:
   Kenneth: Everyone one else is lying. Luann: At least two of us are truth-tellers. Maurice: Kenneth and Nellie aren’t both telling the truth - at least one of them is lying. Nellie: Luann and Maurice aren’t both lying - at least one of them is telling the truth.
   Which of them are truth-tellers and which are liars?

4. Inspector Quincy of Logicia is called in to investigate the theft of Cody’s horse. He rounds up six suspects and obtains these statements from them:
   Rena: Umberto stole the horse. Samuel: Rena is a liar. A woman stole the horse. Tammy: Only one of your male suspects is a truth-teller. Umberto: A truth-telling man stole the horse. Vanessa: A liar stole the horse. William: Samuel or Vanessa stole the horse. Both of them are telling the truth.
   Can Quincy solve the crime based on these statements?

5. Each statement is either True or False.
1. There is at least one false statement on this test.
2. Statement 4 is true.
3. There are at least two consecutive true statements on this test.
4. Exactly two of the next three statements are false.
5. Statements 1 and 2 are true.
6. There are at least two consecutive false statements on this test.
7. The next statement is false.
8. Exactly half of the odd-numbered statements on this test are true.

What are the correct answers on this test?

6. Find a ten-digit positive integer that has these properties: The left most digit is the number of times zero appears in the number, the next digit is the number of times one appears in the number, the next digit is the number of times two appears in the number, and so on until the last digit is the number of times nine appears in the number. Such a sequence is called self-referencing.

7. In a certain competition, each of six contestants competes in each of four events. For each event a judge awards points as follows: 10 points for first place, 6 points for second place, 3 points for third place and 1 point for fourth place. After the four events are completed the contestant with the highest point total is the winner. 
   a) If there is no tie for first place what is the lowest possible score for the winner?
   b) If there is no tie for any place what is the lowest possible score for the winner?

8. Classmate Harry, Ignacio, Julia, Karen, and Leanne are comparing their heights. Place the students in order from tallest to shortest based on this information: The tallest student is a girl. Ignacio is shorter than all three girls. Harry is not the shortest student in the group. Leanne is not the tallest student in the group, but there are at least two students who are shorter than she is. Julia is the third-tallest student in the group.

9. Another True-False test written by a teacher with an odd sense of humor. Find the correct answers.

   1. Every even-numbered statement on this test is false.
   2. Statement 7 is true.
   3. There are three consecutive statements on this test, all of which are true.
   4. Statements 1 and 10 are either both true or both false.
There are exactly five true statements on this test.

There are more true statements on the test before this statement than there are after this statement.

More than half of the first five statements are false.

Statement 3 is false.

Of statements 2, 4, and 8, at least one is true.

The sum of the numbers of all the true statements is at least 20, but no larger than 25.

In a certain village, there are 50 couples. As it turns out, everyone in the village is having an affair. This despite a particularly gruesome custom which requires a wife, upon discovering that her husband is having an affair, to kill him the following morning. Even more oddly, the women in the town talk quite freely about their activities! In fact they are all perfectly aware that any woman who is having an affair will tell EVERY other woman in the village except, of course, for the wife of the man with whom they are having the affair. Yet life there goes on quite peacefully since no woman can know for sure that her husband is actually having an affair. One day, a well revered wise man visits the village and announces that someone is having an affair. What happens after this?

Camels and Bananas A camel has to carry 3,000 bananas across a 1,000 mile dessert. There are two conditions:

1. The camel can only carry 1,000 bananas at a time.
2. The camel eats one banana for each mile he travels. What is the maximum number of bananas that will reach the other side of the desert?
   What if you have three camels?

Light Switches A working light bulb is in a closed room with no windows. Outside the room, is a panel of three switches, one of which controls the light inside (up is on, down is off.) You may do anything you like to the three switches and then enter the room to inspect the light. After this, without any further experimentation, you must indicate which switch controls the light. What do you do?
13. Mr. Thomas has given a true-false test but lost the key. He scores students $A, B$ and $C$, but need to score student $D$. What is $D$’s score?

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