1. If an island's only residents are penguins and polar bears and if there are sixteen heads and thirty-four feet, how many penguins and how many polar bears reside on the island?

2. Ten full crates of walnuts weigh 410 pounds, whereas an empty crate weighs ten pounds. How much do the walnuts alone weigh?

3. There are three separate, equal-size boxes and, inside each box, there are two separate small boxes. Inside each of the smaller boxes, there are three even smaller boxes. How many boxes are there all together?

4. Jerry's mother has three children. The eldest is a boy named Harold who has brown eyes. Everyone calls him Harry because he hates his name. The next younger is a girl named Margaret. Everyone says that she is a math whiz. The youngest child has green eyes and he can wiggle his ears. What is his name?

5. If you expect to get 50,000 miles on each tire from a set of five tires (four tires and one spare tire), how should you rotate the tires so that each tire gets the same amount of wear? How far can you drive before buying a new set of tires?

6. If posts are spaced ten feet apart, how many posts are needed for 100 feet of straight-line fence?

7. At six o'clock, a grandfather clock struck six times. If is was thirty seconds between the first and last strikes, how long will it take the same clock to strike noon?

8. As a person enters the front door at home, the grandfather clock in the living room chimes once. A half-hour later, the grandfather clock again chimes once. Still a half-hour later, the clock chimes once a third time. Then, another half-hour later, the clock chimes once for a fourth time. At what time did the person arrive at home?

9. Two girls were born on the same day of the same month of the same year to the same parents, but they are not twins. Explain how this can be possible.

10. How many outs are there in a baseball game that lasts a full nine innings?

11. Two U.S. coins total thirty cents in value, but one of these coins is not a nickel. What are the coins?

12. You have ten sugar cubes and three cups. How can you place an odd number of sugar cubes in each cup so that
     (a) one cup contains nine sugar cubes?   **(c)** One cup contains seven sugar cubes?
     (b) Two cups contain nine sugar cubes?   **(d)** Two cups contain seven sugar cubes?

13. How many minutes before 10 AM is it if ninety minutes later it will be as many minutes after 11 AM?

14. One person can mow a lawn in six hours and another person can mow the lawn in three hours. How long will it take for them to mow the lawn if they work together?

15. Six glasses are standing in a row. The first three glasses are empty and the last three classes are full of water. By handling only one glass, change the arrangement of the glasses so that no empty glass is next to another empty glass and no full glass is next to another full glass.

16. Alexandra has only $800. She spends two-fifths of the money on clothes and 42.5% of the money on jewelry. Then, she writes a check for $240 for a new watch. What is her financial situation at the end of the day?

17. The cost for hiring a private carriage is shared equally by all passengers. The carriage has seats for forty passengers and the total bill is $70.37. How many passenger-seats are not occupied?