## Math Brainteasers

1. Mary went to Kmart and bought some items from a certain shelf. She found that if she bought 1 it would cost one dollar. If she bought 12 it would cost two dollars. If she bought 144 it would cost three dollars. Can you explain why these items were priced this way?
2. When I asked how old she was, Nicole said, "In two years I will be twice as old as I was five years ago." How old is she?
3. One morning a snail decided he would set out to escape from the bottom of the well in which he lived. He began crawling up the side of the well, climbing 3 feet before stopping to rest for the night. During the night he slid back down 2 feet. He continued this pattern each day and night until he got out. If the well was 10 feet deep, how long did it take the snail to reach the top?
4. Emily needed to measure exactly 4 gallons of water from her garden hose. She had nothing to measure with except a 3-gallon bucket and a 5-gallon bucket. How could she use the buckets to measure exactly four gallons?
5. Matt's sock drawer contains only blue socks and white socks. Matt needs a pair of matching socks, but the light is out and it is pitch dark in the room. He reaches into the drawer in the dark to grab some socks. What is the smallest number of socks he must take to be absolutely sure he has two that match?
6. How long will it take to cut a wooden log into ten pieces if it takes one minute to make each cut?
7. Mr. and Mrs. Smith had seven daughters. Each daughter had one brother. How many people were in the Smith family?
8. A man went up a mountain on Friday. He came back on Friday as well. He was gone for only two days. How can this be possible?
9. There are 12 months in a year. How many of those months have 30 days?
10. How many 3-cent stamps are there in a dozen?
11. A farmer saw 5 crows on a fence. He shot one. How many remained?
12. If it takes 3 minutes to boil one egg, how long does it take to boil three eggs?
13. What is special about the number $8,549,176,320$ ? Hint: this has nothing at all to do with math.
14. If you had two and a half sandpiles and put them together with one and a half sand piles, how many sandpiles would you have?
15. Can you continue the following pattern? Explain what the pattern is. O,T,T,F,F,S, . .
16. A boy's grandfather is only six years older than the boy's father. How can this be? (There are no step-parents or foster-parents involved here.)
17. A child weighs 30 pounds plus half her weight. How much does she weigh?
18. What do you get if you divide 30 by one-half, then add ten?
19. Mr. Ollie Lee bought a personalized license plate for his car. The license plate showed the number 337 31770. Can you figure out why he wanted that number?
20. On a two-pan balance, a brick balances evenly with three-fourths of a brick and a one-half-pound weight. How much does a brick weigh?
21. Morgan Green, Michael Brown, and Marina Silver were sent to the detention room for wearing their hats in school. One child was wearing a green hat, one wore a brown hat, and one wore a silver hat. "Hey," said the one in the silver hat. "Have you noticed that our hats are green, brown and silver, and our names are Green, Brown and Silver, but none of us has a hat that matches our name?" Mike looked at the other two kids and said, "Wow, you're right!" What color hat was each person wearing?
22. Ciara and Jessica both have a pile of starbursts. If Ciara gives a dozen of hers to Jessica, Jessica will have twice as many as Ciara. If Jessica gives a dozen to Ciara, they will have the same number. How many starbursts does each girl have?
23. Imagine you are driving a bus and you head out on your morning route. At the first stop 5 people get on. At the second stop 2 get off, but 7 more get on. At the 3rd stop half of them get off and 9 get on. At the next stop 2 get off and 6 get on. The question: What is the name of the bus driver?
24. Five automobiles are lined up bumper-to-bumper. How many bumpers are touching another bumper?
25. Would it be cheaper to take one friend to the movies twice, or two friends to the movies once? Why?
26. There are three closed boxes of pearls on a table. One contains all black pearls, one contains all white, and one contains a mixture of black and white. They are labeled "B" for black, "W" for white, and "BW" for black and white. However, all 3 labels are wrong. If you were allowed to see just one pearl from one box, how could you figure out the correct labels for the boxes?
27. A balance scale is perfectly balanced when there are three cans of Coke on one side, and one can of Coke and a half-pound bar of gold on the other side. If all the cans are the same size and weight, how much does one can of Coke weigh?
28. If you were placed blind-folded in front of a bowl filled with $\$ 20, \$ 10$, and $\$ 5$ bills, and allowed to take one bill at a time until you had four of one kind, what is the largest amount of money you might end up with?
29. A man and his two sons needed to cross a river, but the only available boat would hold just 200 pounds. The man weighed 200 pounds and each son weighed 100 pounds. How could they all cross the river using the boat?
30. If you wrote all the numbers from 1 to 100, how many times would you write a " 7 "?
31. What gets bigger the more you take away from it?
32. Two fathers and two sons went fishing. Each person caught a fish to take home, but only three fish were brought home. Why?
33.I have two coins in my pocket which add up to 55 cents. One of the coins is not a nickel. What are the two coins?
33. There were 17 horses in the corral. All but nine got out. How many remained in the corral?
34. How much is one-half of one-third of one-fourth of 240 ?
35. Divide 50 by one-half, then subtract 10. How much is that?
