Holiday Math Challenges!

1. If Santa has 9 reindeer, and 4 of them have names that begin with the letter D, how many of the reindeer do not have names that begin with a D?

2. If there are 15 Reindeer in a corral, and 5 of them leave to build toys, how many are left?

3. If 9 reindeer show up to work with Santa, and each brings one friend to help, how many Reindeer would there be in total?

4. If Santa uses 8 reindeer to drive his sleigh, how many eyes do the reindeer have in total?

5. If Santa uses 8 reindeer to drive his sleigh, how many legs do the reindeer have in total?

6. Santa decides to buy name tags for his 9 reindeer! Their names are: Dasher, Dancer, Prancer, Vixen, Comet, Cupid, Donner, Blitzen, Rudolph.

For each name tag, vowels cost $3 and consonants cost $5:
a. Which 3 reindeer are tied for the most expensive names?
b. Which 3 reindeer are tied for the least expensive names?
c. How much did Santa pay for the name tags for all 9 reindeer?

7a. If Rudolph the red-nosed reindeer's nose uses 3 red light bulbs to glow, and those light bulbs blow out every 8 hours, how many light bulbs will Rudolph need if he is going to work (and glow) for 24 hours?

7b. If Rudolph's bulbs cost $1.25 each, how much will Rudolph have to spend for his 8 hours worth of light bulbs? 6. If Christmas falls on Sunday, December 25th, what day of the week will New Year's Day be?

8. What fraction of Santa's reindeers have names that start with a D? (see question 4 for reindeer names)

9. Santa is delivering gifts on a perfectly square city block. After he completes delivering gifts to the people on the first two sides of the square, he has traveled 120 feet. How far will he have to travel to completely go around the square block?

10. If there are 20 grams of sugar in each snowman shaped cookie, how many grams of sugar are in 2 1/2 of the cookies?

11. One of Santa's elves eats too much breakfast during the holiday season! He starts off weighing 30 pounds, but each morning he gains 5 pounds. He works so hard making toys in Santa's factory each day, he loses 3 pounds by the night? If this pattern continues, how much does the elf weigh after 12 days have passed?

12. If there are 9 people under the mistletoe, and each person has to give all the others a holiday hug, how many hugs will be given in total?

13. For the Hanukkah holiday, 2 candles are burned the first night, and then one additional candle is burned each night after that (3 candles on the 2nd night, 4 candles the 3rd night, etc.) How many candles will be burned in total if Hanukkah is 8 days long?

14. An artificial Christmas tree weighs 51 pounds. If there are 3 parts that make up the tree, and each part weighs the same amount, how much does each part weigh?

15. If the distance around Earth is 24,000 miles, and Santa has to get around the entire planet in 12 hours, how many miles will he have to travel each hour?

16. If Santa delivers 5 gifts to the 1st house, 11 gifts to the 2nd house, 23 gifts to the 3rd house, How many gifts would he deliver to the 7th house?

17. If it takes Santa's reindeers 11 hours to travel 5500 miles, how many miles per hour were they traveling?

18. Santa's reindeer travel 30 miles an hour on the way to deliver gifts, and twice that speed on the way back to the North Pole. If they travel 300 miles each way, how long will it take Santa to get home to the North Pole? (ignore the fact that Santa might stop a few times)

19. Your parents decide to give you quarters (25) on each day of the 12 days of Christmas. On the first day, they give you 1 quarter, on the second day, 2 quarters, on the third day 3 quarters, etc. How many quarters will you have by the 12th day? How much money will you have?