

EXTRA CREDIT

NAME: _____

PLEASE SUBMIT YOUR ORDERED ANSWERS ON A SEPARATE SHEET(S) OF PAPER!

DUE : Oct 27

ANSWERS ON THIS SHEET WILL NOT COUNT!

SHOW ALL YOUR WORK! ANSWERS WITHOUT DETAILED EXPLANATION WILL NOT COUNT.

ALL WORK SUBMITTED MUST BE CLEARLY LEGIBLE.

1.
 - (a) You have two American coins that total 30 cents. One of the coins is not a quarter. What are the two coins?
 - (b) Some months have 31 days; how many have 28?
 - (c) Why can't a man living in the USA be buried in Canada?
 - (d) Before Mount Everest was discovered, what was the highest mountain on Earth?
 - (e) How many animals of each sex did Moses take on the ark?
 - (f) A plane full of English tourists travels from Holland to Spain. It crashes in France. Where should the survivors be buried?
 - (g) If you drive a bus with 42 people on board from Gary to Chicago and drop off 3 people at each of the six stops and pick up 4 people at half the stops, when you arrive at Chicago 2 hours later what is the driver's name?
 - (h) Do they have a 4th of July in England?
 - (i) If I took 12 apples from a pile of 23 apples, how many apples would I have?
 - (j) Is it legal for a man in California to marry his widow's sister? Why?
 - (k) A woman gives a beggar 50 cents; the woman is the beggar's sister, but the beggar is not the woman's brother. Explain this.
 - (l) If you have only one match and you walked into a room where there was an oil burner, a kerosene lamp, and a wood burning stove, what would you light first?
 - (m) Divide 30 by $\frac{1}{2}$ and add 10. What is the answer?
 - (n) Why are 2009 dollar bills worth more than 2008 dollar bills?
 - (o) The 22nd and 24th presidents of the United States had the same mother and the same father, but were not brothers. How could this be so?
 - (p) Becky's mother has three daughters. She named the first daughter Penny and her second daughter Nichole. What did she name the third daughter?
 - (q) If it takes $6\frac{1}{2}$ minutes to boil an egg, how long does it take to boil five eggs?
2. Say that cucumbers are on sale, so you buy 100 pounds of them at your local market. The cucumbers are 99% water. Some days later, they dry out to 98% water. How much do they weigh now?
3. I am twice as old as my sister was when I was the age that she is now. The sum of our present ages is 49. How old are we?
4. If four cows produce 8 cans of milk in 4 days, how many days does it take eight cows to produce 16 cans of milk?

5. What is wrong with the following argument? (You have to explain which step is wrong, and exactly **why** it is wrong!)
- (a) 12 eggs = 1 dozen
- (b) Multiply both sides of equation (a) by 2: 24 eggs = 2 dozen
- (c) Divide both sides of equation (b) by 4: 6 eggs = $\frac{1}{2}$ dozen
- (d) Multiply equation (b) with equation (c)¹: 144 eggs = 1 dozen
- (e) Replace 144 eggs with 12 dozen: 12 dozen = 1 dozen
- (f) Drop dozen: 12 = 1
6. If it takes a man one hour to dig a hole two meters long, two meters wide, and two meters deep, how long would it take the same man to dig a hole four meters long, four meters wide, and four meters deep, assuming he digs at the same rate of speed.
7. **Ask Marilyn:** By Marilyn vos Savant Published: January 16, 2005
At 60 mph, it takes 60 seconds to travel a mile. At 120 mph, it takes 30 seconds. At what speed would it take 45 seconds?
8. It takes you 30 seconds to walk from the first (ground) floor of a building to the third floor. How long will it take to walk from the first floor to the sixth floor (at the same pace, assuming that all floors have the same height)?
9. If a parade 3 miles long is proceeding at 3 m.p.h., how long will it take a runner, jogging at 6 m.p.h., to travel from the front of the parade to the end of the parade?
10. The price of a book is \$1 plus half its price. What is the price of the book?
11. If you had a piece of paper that was 0.001 inch thick, how tall a pile would it make if it was doubled (folded) fifty times?
12. Four different pumps are filling an aluminum pool, of dimensions $3 \times 3 \times 7$ feet. Every hour the amount of the water in the pool doubles. The first pump pumps twice as fast as the second, and three times as fast as either third or fourth. The pumping begins on Tuesday at 8:00 a.m. and ends on Wednesday at 2:00 p.m. The attendant is reading a book called "I love Math" next to the pool, turning pages at the pace of one page per minute. She is drinking iced tea chilled to a comfortable $45^\circ F$. The temperature of the air is $95^\circ F$ and the temperature of the water is $80^\circ F$. At $4^\circ C$ the density of the water is 1 g/cm^3 , while at $20^\circ C$ the density of the water is 0.9982 g/cm^3 . At what time is pool exactly half-full?
13. What day would tomorrow be if yesterday were five days before the day after Sunday's tomorrow?
14. Four volumes of *The Complete Works of Iztok Hozo* are standing in numerical order (from left to right) on a shelf. The Volume I has 1500 pages, Volume II has 5000 pages, Volume III has 3000 and Volume IV is only 500 pages long. A bookworm starts eating through the first page of volume I going in straight line and ends at the last page of volume IV. Not counting covers, title pages, etc., how many pages does the bookworm eat through?
15. Evaluate:
- $$\frac{(12345678903)^2 - (12345678902)^2 - (12345678901)^2 + (12345678900)^2}{(12345678901)^2 - (12345678900)(12345678902)}$$

¹ We can do that, since: if $A = B$ and $C = D$, then $AC = BD$