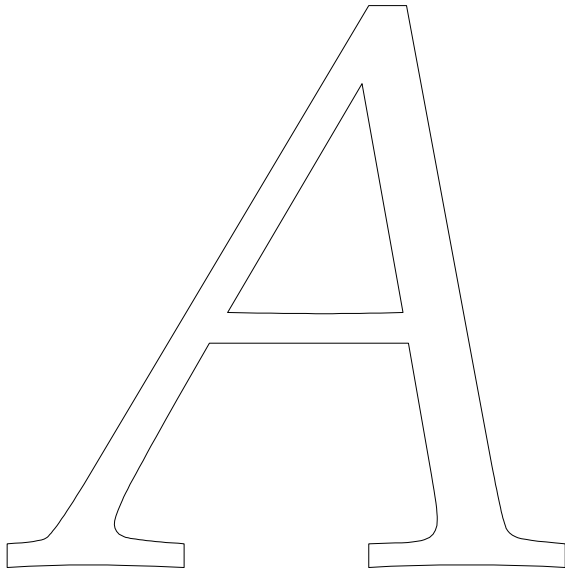


REMT 2007

ANSWERS



1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
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9. _____
10. _____
11. _____
12. _____
13. _____
14. _____
15. _____

ARITHMETICAL

ANALYSIS

LAST NAME

FIRST NAME

GRADE

Be sure to write each of your answers on the answer sheet.

1. The sum of the even integers from 2 to 1000 is 250,500. What is the sum of the odd integers from 1 to 999?
2. 56% of 72 is 64% of what number?
3. What is the exact value of $\sqrt{3\frac{1}{16}}$?
4. What is the cube root of 91,125?
5. What is the largest integer that evenly divides each of 252, 378, and 945?

6. If the number 200 is increased by 40%, and if that result is then decreased by 40%, what is the final result?
7. When a certain positive number is subtracted from its square, the result is 600. What is that number?
8. What is the exact value, expressed as a fraction in lowest terms, of $\frac{3}{4} - \frac{2}{3} + \frac{1}{2}$?
9. What is the exact value, expressed as a fraction in lowest terms, of $1\frac{2}{5} \div 2\frac{1}{3}$?
10. What number is $\frac{5}{8}$ of the way from 22 to 70?

11. I have \$22.75 in pennies, nickels, dimes, quarters, and half-dollars. If I have an equal number of coins of each kind, how many coins do I have altogether?

12. A certain positive number minus its reciprocal is equal to $\frac{5}{6}$. What is this number?

13. If we start adding the positive integers together: $1+2+3+\dots$, and continue until the sum exceeds 1000, what was the last integer we added?

14. Light travels at a speed of 186,000 miles per second. The sun is 93,000,000 miles from earth. How long, in minutes and seconds, does it take light from the sun to reach the earth?

15. If a megabyte is 2^{20} bytes, and a gigabyte is 2^{30} bytes, and if a music file can store one minute of music per megabyte, how many hours of music can I store on my 30 gigabyte portable media player?