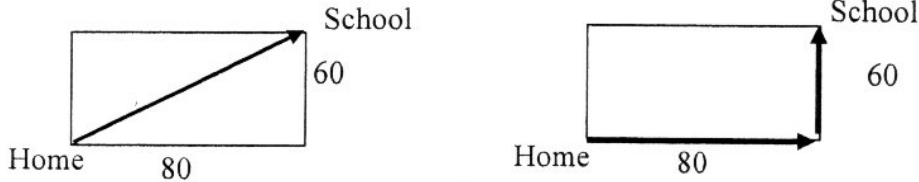


745. Betty and Sue each purchased food for a party. They agreed to share the expenses equally. Betty paid \$12.25 for the cake and \$10.28 for the ice cream. Sue paid \$86.93 for the rest of the food. How much money does Betty owe Sue?

\$ _____

746. On their way to school, Martha and her little sister used to walk diagonally across a rectangular lawn that is 80 feet by 60 feet, as shown in the picture on the left. Now the lawn is fenced and they have to walk around it, as shown in the picture on the right. How much farther is it to walk around the rectangular lawn than to walk across it?



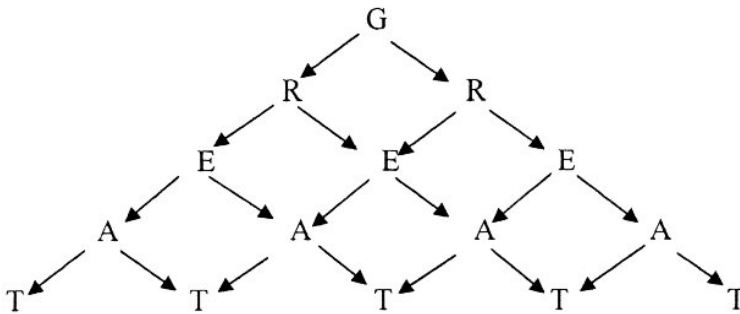
_____ feet

747. I am thinking of two counting numbers, M and N. M is four times as great as N. What is the value of $\frac{6M}{2N}$?

748. An N-inch tile is a square tile that measures N inches on each side. It takes 243 eight-inch tiles to cover a floor entirely. How many four-inch tiles will it take to cover the same floor?

_____ tiles

749. All the different pathways shown spell out GREAT. How many different pathways are there?



_____ pathways

750. In the sequence below, find the number represented by N.

17 12 7 2 N -8

751. Johnny lives in Fairbanks, Alaska. On January 25, 2006, the high temperature was -34°F . On February 25, 2006, the high temperature was 46 degrees higher than it was on January 25. On March 25, 2006, the high temperature was 14 degrees higher than it was on February 25. What was the high temperature on March 25, 2006?

_____ $^{\circ}\text{F}$

752. Two cars are traveling toward each other on a straight road. Both cars are traveling at 45 miles per hour. About how far apart will they be 10 minutes after they pass each other?

- A. 4.5 miles B. 7.5 miles C. 9 miles D. 15 miles

Write the letter of the correct choice on the blank to the right.

753. Find the sum of the reciprocals of $\frac{10}{3}$ and $\frac{5}{6}$. Write your answer as a mixed number in simplest form.

754. Sheila weighs her new puppies in pairs since they resist being weighed individually. Shep and Jep together weigh 12 pounds. Shep and Pep together weigh 13.6 pounds. Jep and Pep together weigh 12.8 pounds. How much does Pep weigh?

_____ pounds

755. Alex calculated the product of 2.5 and the sum of 3.7 and 4.8. What should be the result of Alex's calculation? Do not round your answer.

756. Write as a fraction in simplest form:

$$\frac{2^2 + 2^1}{2^3 + 2^4}$$

757. Ellen DeGeneres was born in 1958. Bill Cosby is exactly 20 years older than DeGeneres. In what year will Cosby celebrate his 75th birthday?

758. Adult tickets for the school play sell for \$6 each and student tickets sell for \$4 each. Mike sold 18 tickets for a total of \$86. How many adult tickets did he sell?

_____ adult tickets

759. MaryAnne bought a digital camera. The regular price of the camera was reduced by 15%, then 7% sales tax was added to this reduced price. MaryAnne paid \$127.33 for the camera. What was the regular price of the camera without the sales tax?

\$ _____

.....

760. Judith spent 1 hour 20 minutes mowing her lawn and 45 minutes weeding the garden. She stopped for a 20-minute break, then spent 25 minutes sweeping the garage, after which she stopped working. She then looked at the clock and saw it was 12:40 pm. What time did Judith start mowing her lawn?

_____ a.m.

.....

The chart below shows the number of each type of coin minted in the U.S. during the first four months of 1988.

Month	Pennies	Nickels	Dimes	Quarters	Half-Dollars
Jan.	753,200	71,280	152,500	102,200	3,400
Feb.	685,200	84,960	158,500	116,600	7,500
Mar.	938,600	108,720	190,500	129,400	13,500
Apr.	876,000	98,880	165,500	132,600	6,200

Use the information in the chart to answer questions 761-763 below.

761. During the month of January, how many more pennies were minted than all of the other coins combined?

_____ pennies

.....

762. Find the average value (in dollars) of the dimes minted per month.

\$ _____

.....

763. The average number of nickels minted per month during the first five months (January to May) was 94,896. How many nickels were minted during the month of May?

_____ nickels

.....

A bag contains marbles of different colors. Exactly 12 of the marbles are red. The probability of randomly drawing one of the red marbles from the bag is $\frac{2}{3}$.

Use the information above to answer questions 764 and 765.

764. How many marbles are in the bag?

_____ marbles

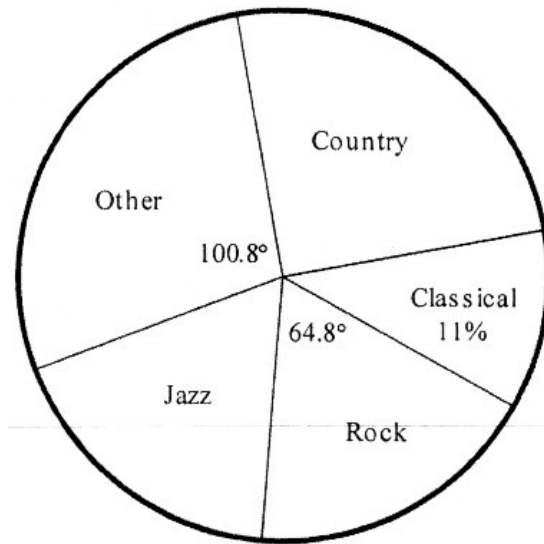
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765. The probability of randomly drawing one of the blue marbles from the bag is $\frac{1}{6}$. How many blue marbles are in the bag?

_____ blue marbles

.....

The circle graph below shows partial information on the results of a survey to determine students' top choice of different types of music.



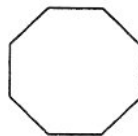
Use the information in the graph to answer questions 766 - 768.

766. What percent of the total number of students indicated that rock music was their top choice?
 _____ percent

767. Find the measure of the central angle of the sector labeled Classical. Do not round your answer.
 _____ degrees

768. According to the survey, 56 students indicated their top choice of music as Other. How many students participated in the survey?
 _____ students

769. A stop sign is shaped like a regular octagon. All of the obtuse angles have the same measure. Find the measure of one of the eight obtuse angles.



_____ degrees

770.

Suppose that ∇N means $4N + 5$ and $\triangle N$ means $3N - 1$.

For example, $\nabla 3 = 4(3) + 5 = 17$ and $\triangle 3 = 3(3) - 1 = 8$.

What is the value of $\nabla 9 + \triangle 8$?

771. Joe used 48 one-inch square color tiles to make a rectangle with the largest possible perimeter. What is the perimeter of Joe's rectangle?

_____ inches

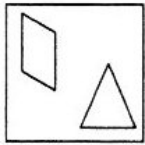
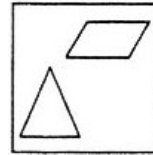
772. A sofa is centered along a wall so that there are 3 feet of blank wall space on each side of the sofa. A framed picture is centered on the wall above the sofa. The frame is a square that measures 30 inches on each side. There are 60 inches between the right side of the frame and the right edge of the wall. How many inches long is the sofa?

_____ inches

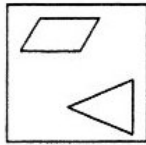
773. A rectangle is 19 cm long and 7cm wide. A square has the same perimeter as this rectangle. How much larger is the area of the square than the area of the rectangle?

_____ square cm

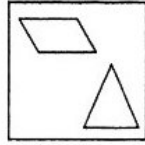
774. Suppose the figure shown at the right is rotated 270 degrees clockwise about its center. Which one of the figures below would represent the result?



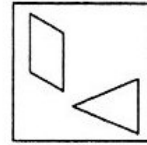
A.



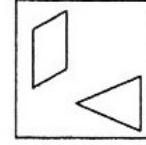
B.



C.



D.



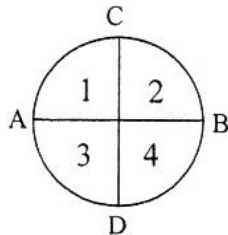
E.

Write the letter of the correct choice on the blank to the right.

775. Maria is building models of cubes, using a gumdrop for each vertex and a toothpick for each edge. She has 100 toothpicks and 60 gumdrops. What is the greatest number of separate cubes she can make?

_____ cubes

776. Diameters AB and CD divide the circle into four congruent sectors. The length of diameter AB is 5 cm. What is the perimeter of sector 4? Use 3.14. for π and round your answer to the nearest tenth of a cm.



_____ cm

777. Find the value of $50 - 49 + 48 - 47 + 46 - 45 + \dots + 4 - 3 + 2 - 1$.

Fact: The symbol " ..." means that the pattern continues.

.....
778. Ann, Betty, Cindy, Doris, and Emily have 6, 11, 15, 22, and 30 marbles, but not necessarily in that order.

Ann has twice as many marbles as Emily.

Cindy has more marbles than Doris.

Betty has more marbles than Ann.

Who has 15 marbles?

.....
779. I'm thinking of a three-digit number. All of the digits are greater than 1. Two digits are prime numbers and the tens digit is a perfect square number. Two digits are even and the third is odd. It is the smallest number that meets the requirements above. What number am I thinking of?

.....
780. Two decimal numbers have a difference of 1.0 and a product of 6.51. What is the sum of the two numbers?

.....
781. The grass carp is a fish that is not native to Minnesota. It is an unwanted species because it grows to a large size and normally will consume 40% of its body weight of vegetation per day, thereby starving out native fish. On Tuesday, a grass carp ate normally and consumed 14 pounds of vegetation. What was the weight of this carp at the beginning of that Tuesday morning?

_____ pounds

.....
782. Billy has nickels and dimes in his pocket. He has eleven coins altogether. If he had twice as many dimes and half as many nickels, he would have \$0.35 more than he has now. How many nickels are in Billy's pocket?

_____ nickels

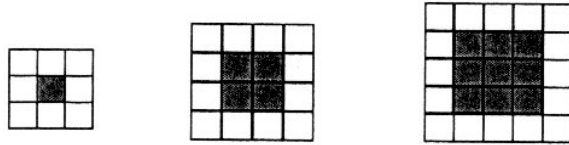
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783. Marco's family left home at 5:30 a.m. to go to his grandparents' house. They reached the halfway point at 10:45 a.m., stopped for a 30-minute break, drove another 120 miles and then stopped for a snack at 1:30 p.m. During the snack, Marco learned that they had 220 miles remaining. How far is it from Marco's house to his grandparents' house?

_____ miles

.....
784. Two fractions are written in simplest form and each have a denominator of 12. The sum of the two fractions is $1\frac{1}{3}$. What is the numerator of the larger fraction?

.....

785. In a series of square figures, the lengths of the sides of each figure increase by one unit each time and all of the inner squares are shaded. The first three figures in the series are shown below.



What percent of the sixth figure will be shaded? Round your answer to the nearest percent.
 _____ %

786. It costs the U.S. Mint 1.2 cents to mint (make) a penny. It cost approximately \$92.4 million to mint pennies in 2005. Approximately how many pennies were minted in 2005?

- A. 7.7 billion B. 11.9 billion c. 110.9 million D. 77 million

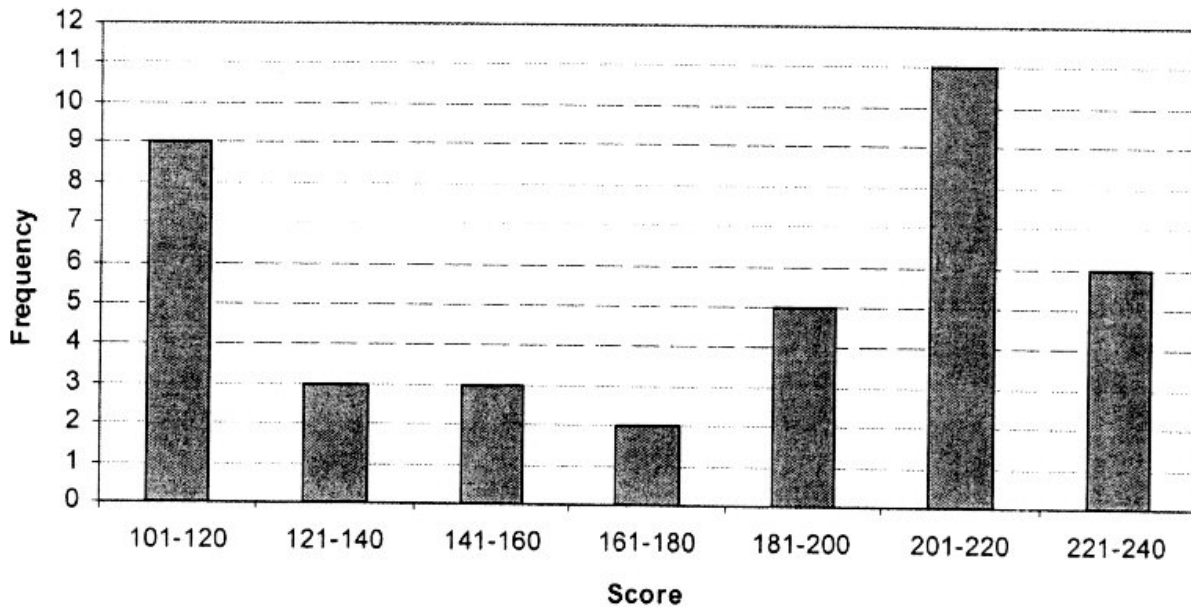
Write the letter of the correct choice on the blank to the right.

787. During her basketball game, Jenny scored $\frac{1}{2}$ of her team's points. Sarah scored $\frac{1}{3}$ of the remaining points, and Gina $\frac{1}{4}$ of the points remaining after that. Jervaise was the only other player to score, and she made 6 points. How many points did Sarah score?

_____ points

788. If you could spend exactly one hundred dollars per day starting on Monday, on which day of the week would you spend the millionth dollar?

Dev's bowling scores for an entire season are shown on the bar graph below.



For example: There are 9 scores in the interval 101-120.

Use the information in the graph to answer questions 789 - 791.

789. How many games did Dev bowl during the entire season?
_____ games

790. In which interval of scores can the median score be located?

791. Which interval of scores represents the mode? Write your answer as an interval.

792. After Tom had taken his fifth math quiz, his average score on the math quizzes was 37.2 points. After he had taken his sixth math quiz, his average score on all the math quizzes was 37 points. What was his score on the sixth math quiz?
_____ points

The chart below shows information about the five largest lakes in North America.

Lake	Area (in square miles)	Length (in miles)	Maximum Depth (in feet)
Superior	31,700	350	1,330
Huron	23,000	206	750
Michigan	22,300	307	
Great Bear	12,100	192	1,462
Great Slave	11,000	298	2,015

Use the information in the chart to answer questions 793-795 below.

793. Which lake has a length that is closest to the mean length of the five lakes?

794. To obtain a rough estimate of the average width of a lake, the area of each lake is divided by the length of that same lake. For which lake is this quotient the largest?

795. The mean maximum depth of the five lakes is 1,296 feet. Find the maximum depth of Lake Michigan.
_____ feet.

A circle graph is made showing the **areas** of the five lakes.

796. What percent of the circle graph does Lake Superior represent? Round your answer to the nearest percent.
_____ percent

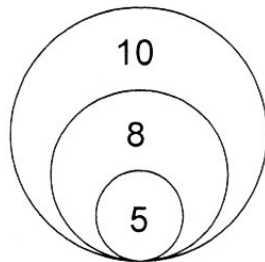
797. Find the measure of the central angle of the sector representing the **smallest** of the five lakes. Round your answer to the nearest hundredth of a degree.
_____ degrees

798. Kofi has some colored balls in a box. The balls are alike in all ways except for their color. The probability of randomly selecting a red ball from the box is $\frac{5}{12}$. There are 21 balls in the box that are not red. How many balls of all colors are in the box?

_____ balls

.....

799. Herman put on a blindfold and threw four darts at the strange target shown below. His score was obtained by adding the numbers in the regions in which the darts landed. At least three of the four darts hit the target. None of the darts landed exactly on a boundary line.



Which one of the scores below could not be Herman's score?

- A. 29 B. 26 C. 23 D. 22 E. 18

.....

800. A twenty-task challenge course is scored as follows:

Three points are awarded for each task that is completed.

Two points are subtracted for each task that is attempted but not completed.

Zero points are awarded for each task that is not attempted.

Emma scored 47 points. How many of the twenty tasks did she complete?

_____ tasks

.....

801. The mean of nine quiz scores is 20. All but two of the scores are shown below.

14 14 16 19 21 22 24

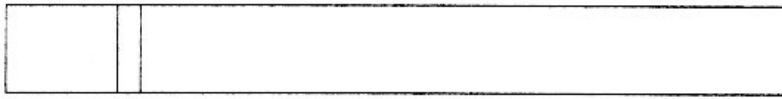
The two missing scores have a difference of 8. What is the median of all nine quiz scores?

.....

802. Katie and Zane each roll a fair die once. What is the probability that Katie's die shows a number larger than Zane's die? Write your answer as a fraction in simplest form.

.....

803. Seimone has a rectangular garden that measures 35 feet by 4 feet. She divides the garden into 6 congruent rectangular sections, with a 1-foot path between sections. The first section and path are shown below. What is the area of one of the six sections?



_____ square feet

.....
 804. Two decimals have a sum of 6.98 and a difference of 2.36. What is the larger number?

.....
 805. The first six numbers in an arithmetic pattern are shown below.

3 10 17 24 31 38

What will be the 40th number in the pattern?

.....
 806. Find the sum of 40% of $\frac{1}{2}$ and 20% of $\frac{3}{8}$.

Write your answer as a fraction in simplest form.
