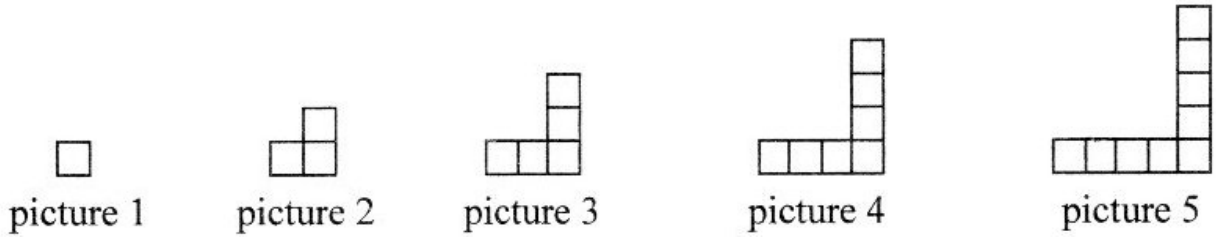
559. Tara has 3 bottles of water. The first bottle holds 4.25 liters of water.
The second bottle holds 360 ml of water. The third bottle holds 1250 ml of water. How many liters of water do the three bottles hold altogether? Do not round your answer.

_____ liters

. . . . . .

560. Each picture below is made up of squares that measure 1 unit on each side. If the pattern shown below continues, what will be the perimeter of picture 20?



_____ units

. . . . . .

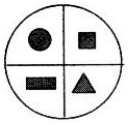
561 Find the missing number in the pattern below.

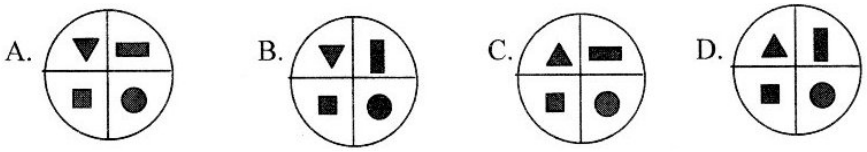
-63, -44, ?, -6, 13, 32

_____

. . . . . .

562. Suppose the figure at the right is rotated 180° clockwise about its center. Which of the following would show the result?





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

_____

. . . . . .

563. Maurice chose 3 different prime numbers and multiplied them together. Each of the numbers was greater than 10. Which one of the statements below was <u>not</u> true of the product?

A. The product was a composite number.
B. The product was an odd number.
C. The product was greater than 1200.
D. The product was a prime number.
Write the letter of the correct choice on the blank to the right.

_____

. . . . . .

564. The perimeter of one face of a cube is 32 cm. What is the total <u>area</u> of all the faces of the cube?

_____ square cm

. . . . . .

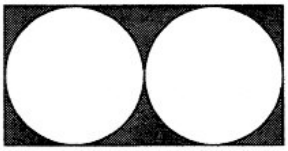
565. A store is having a sale on jeans. If you buy one pair at the regular price, you get a second pair of equal value for 30% off. George bought two pairs of jeans of equal value during the sale. The regular price of each pair was N dollars. Which expression could be used to figure the amount George paid during the sale for the two pairs of jeans?

A. 2N - 0.30 B. N + 0.70N C. N + 0.30N D. N + 0.70

_____

. . . . . .

566. Two circles are placed side by side. They fit exactly in a rectangle, as shown in the diagram to the right. Each circle has a diameter of 6 inches. Which of the following is the best estimate for the area of the shaded portion of the diagram?



A. 13.5 square inches
B. 15.5 square inches
C. 17.5 Square inches
D. 19.5 square inches
Write the letter of the correct choice on the blank to the right.

_____

. . . . . .

567. Shayna calculated 87.5% of 0.6. She wrote her answer as a fraction in simplest form. What fraction should Shayna get for her answer?

_____

. . . . . .

568. The Hawaiian Ironman Triathlon is a grueling competition that involves a 2.4-mile swim, a 112-mile bike race, and a 26.2-mile run. In 2001, the first-place finisher in the women's division had a winning time of 9 hours 28 minutes 37 seconds. The first-place finisher in the men's division had a winning time that was 57 minutes and 19 seconds **faster** than that of the first-place woman. What was the winning time for the first-place finisher in the men's division

.

_____ hrs _____ min _____ sec

. . . . . .

569. A regulation basketball will bounce back $\frac{2}{3}$ of the height from which it is dropped. When a regulation basketball was dropped, it bounced back to a height of 1.6 meters. From what height was it dropped?

_____ meters

. . . . . .

570. Sally's Soda Company produces 40 cans of Fountain Dew every minute. Each case holds 24 cans and sells for $5.00. What is the total selling price of the Fountain Dew that Sally's Soda Company produces in a one-hour period?

$ _____

. . . . . .

571. Thanksgiving Day is observed in the United States on the fourth Thursday of November. What is the latest possible date that Thanksgiving is observed in the United States?

November_____

. . . . . .

572. In a biology class, $\frac{2}{5}$ of the students are sophomores and 25% are juniors. The remaining 28 students are seniors. How many juniors are in the class?

_____ juniors

. . . . . .

573. I'm thinking of a two-digit counting number. It is a prime number. It is 2 more than a multiple of seven. The sum of the two digits is 10. What number am I thinking of?

_____

. . . . . .

574. An umbrella is on sale for 20% off the regular selling price. During a clearance sale, the sale price was reduced by 10%, resulting in a clearance sale price of $15.48. What was the regular selling price of the umbrella?

$ _____

. . . . . .

575. Sundar averaged 88 points on his first five math quizzes. What was his score on the sixth math quiz if he averaged 89 points on the six quizzes?

_____ points

. . . . . .

Miss Craigwell has 16 red balls, 4 white balls, and some blue balls in a box. The balls are all identical except for their color. Use this information to answer questions 576 - 579.

576. The probability of randomly choosing a red ball from the box is $\frac{2}{5}$. How many blue balls are in the box?

_____ blue balls

. . . . . .

577. Miss Craigwell puts all the red balls and all the white balls into an empty bag. She invites Sammy to remove a ball at random from the bag. What is the probability that Sammy will remove a red ball? Write the answer as a fraction in simplest form.

_____

. . . . . .

578. All of the balls are put back into the box. Nicolas is invited to randomly remove one ball at a time from the box until he gets a blue ball. What is the smallest number of balls he must remove in order to be sure to get a blue ball?

_____ balls

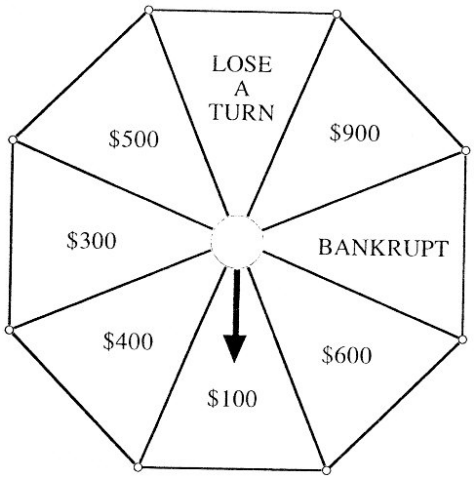
. . . . . .

579. All of the balls are put back into the box. Alexis is invited to randomly remove one ball at a time from the box. What is the smallest number of balls she must remove in order to be sure to get two balls of the same color?

_____ balls

. . . . . .

Contestants are chosen to spin the arrow on the spinner shown below. If the arrow stops in a sector with a dollar amount, the contestant wins that amount of money. Assume that when the arrow is spun, it is equally likely to stop in any one of the eight sectors of the spinner.



Use the information in the spinner to answer questions 580 - 582.

580. Ziggy spun the arrow once. Find the probability that she won an amount of money that is a multiple of 200. Write the answer as a fraction in simplest form.

_____

. . . . . .

581. Elton earned two chances to spin the arrow. He won $300 on his first spin. Find the probability that he won a total of at least $800 on his two spins. Write the answer as a fraction in simplest form.

_____

. . . . . .

582. A circle graph is made to represent the spinner. Find the sum of the measures of the central angles for the sectors representing Lose A Turn and Bankrupt.

_____ degrees

. . . . . .

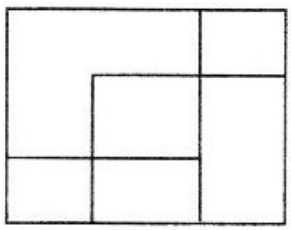
583. Megan has 3 times as many fish as Brenda. Brenda has 2 more fish than Amy. Amy has 5 fewer fish than Sharon. If Sharon has N fish, how many fish does Megan have?

A. N + 10 B. 3N - 3 C. 3(N - 3) D. 3N + 7

_____

. . . . . .

584. How many rectangles of all sizes are in the picture below?



_____ rectangles

. . . . . .

585. Fact: There are 508 cm in 200 inches. How many centimeters are there in 325 inches? Do not round your answer.

_____ centimeters

. . . . . .

586. In the magic square below, each row and column must have the same sum. Find X + Y + Z.

Z	– 5	– 6	Y
– 3	2	3	0
1	– 2	– 1	4
– 4	X	6	– 7

_____

. . . . . .

587. At the Video Bonanza store, all games cost the same amount to rent, and all movies cost the same amount to rent. Games cost more to rent than movies. Bill rented 1 movie and 2 games for $11. Sharon rented 2 movies and 3 games for $17.50. How much does it cost to rent 1 game at the Video Bonanza store?

$ _____

. . . . . .

588. Abe, Ben, Carl, Don, and Ed ran in a race. Ed did not finish last. Carl finished before Ed. Abe finished 2 seconds before Don. Ben's finishing time was 45 seconds. The finishing times were 40 seconds, 43 seconds, 45 seconds, 50 seconds, and 52 seconds. Who finished the race first?

_____

. . . . . .

589. An example of three consecutive odd numbers is 9, 11, 13. The number 11 is the middle number when they are arranged from smallest to largest. Five consecutive odd numbers have a sum of 235. What number is in the middle when they are arranged from smallest to largest?

_____

. . . . . .

590. Find the value of the missing number **X** in the sequence below.

6, **X**, 9, 12, 16, 21, 27, 34, 42

_____

. . . . . .

591. A rectangle has an area of 30 square inches. A similar rectangle has an area of 120 square inches. Which of the following statements must be true?

A. The length of the larger rectangle is 4 times the length of the smaller rectangle.
B. The length of the larger rectangle is 3 times the length of the smaller rectangle.
C. The length of the larger rectangle is twice the length of the smaller rectangle.
D. There is not enough information given to determine how the lengths of the rectangles compare to each other.

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

_____

. . . . . .

592. Amanda has a collection of identical cubes. She places a half-pound weight and 30 cubes on one side of a balance scale. She places a two-pound weight and 6 cubes on the other side of the scale. The scale balances. How many of these cubes will balance a one-pound weight?

_____ cubes

. . . . . .

593. It is now Thursday 3:00 p.m. What will be the day and time 1,400 hours from now?

_____ _____
Day Time

. . . . . .

594. The Hamburger Hut served 64,000 hamburgers last year. On average, 0.4 ounces of catsup was used per hamburger. Which of the choices below best represents the number of 16-ounce bottles of catsup the Hamburger Hut needed just for hamburgers last year?

A. 1000 B. 1600 C. 4000 D. 10,000

_____

. . . . . .

595. Abe bought a brand new bag of marbles. He gave $\frac{1}{2}$ of the new marbles to Jasmine. Jasmine gave Carl $\frac{1}{3}$ of the marbles she received from Abe. Carl gave Katie $\frac{1}{4}$ of the marbles he received from Jasmine. Katie received 4 marbles from Carl. How many marbles were in the bag that Abe bought?

_____ marbles

. . . . . .

596. In Penelope's Pet Shop, $\frac{1}{4}$ of the pets are dogs, 37.5% are cats, $\frac{1}{8}$ are birds, and the rest are gerbils. There are 48 pets in all. How many gerbils are in Penelope's Pet Shop?

_____ gerbils

. . . . . .

597. Jimmy defines a three-digit number as "groovy" if it meets the following conditions:
All three digits are different. The three digits appear in increasing order. The third digit is the sum of the first two digits. For example, 235 is a groovy number. According to Jimmy's definition, how many three-digit numbers are groovy?

_____

. . . . . .

598. The Camera Shop is having a sale in which the regular selling price is reduced. A camera that regularly sells for $350 is on sale for $287. By what percent was the regular selling price reduced?

_____ %

. . . . . .

599. D'Wayne and Judy sold yo-yos at the crafts fair. They sold half as many $4.00 yo-yos as they did $3.00 yo-yos. Altogether, they took in $90.00 for these yo-yos. How many yo-yos did they sell? Assume they did not charge sales tax.

_____ yo-yos

. . . . . .

600. On a trip of 300 miles, Melissa's compact car averaged 35.4 miles per gallon. At this same rate, how many gallons of gas should Melissa expect to use on a 243-mile trip? Round your answer to the nearest tenth of a gallon.

_____ gallons

. . . . . .

601. Ben scored exactly 80% on his history test. He answered 24 questions correctly. Jenny had two more correct answers than Ben. What was Jenny's percentage score on the history test? Round your answer to the nearest percent.

_____ %

. . . . . .

602. Which of the following represents the <u>longest</u> period of time?

A. 1000 minutes B. 10% of one week C. 2/3 of one day D. 16.5 hours

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

_____

. . . . . .

603. Elma had 8 blue socks and some black socks in a laundry basket. She reached in, randomly selected one sock, and put it on. This sock was blue. The probability of randomly selecting another blue sock in now $\frac{1}{3}$. How many <u>black</u> socks were in the laundry basket?

_____ black sock(s)

. . . . . .

Jeremy recorded individually the number of sit-ups he and seven of his friends could complete in one minute. He listed the numbers as shown:

35, 37, 47, 38, 36, 31, 35, 35

604. Find the mode of the eight numbers given.

_____

. . . . . .

605. Find the median of the eight numbers given.

_____

. . . . . .

606. Two more friends, Amanda and Betsy, asked to participate in the activity. Of the two, only Amanda was able to complete more than 38 sit-ups. Jeremy noted that after these two numbers were added to the list, the median of the four largest numbers was 40. How many sit-ups was Amanda able to complete?

_____ sit-ups

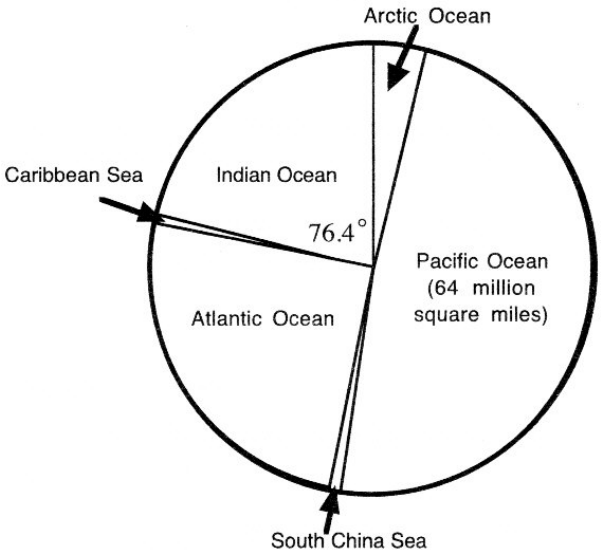
. . . . . .

607. When Jeremy examined the complete list of 10 numbers, he noted that the mean of the five smallest numbers was 32. How many sit-ups was Betsy able to complete?

_____ sit-ups

. . . . . .

The pie graph below shows the relative areas of the six major bodies of water on Earth.



Note: Total area of all six bodies of water is 132 million square miles.
(All areas have been rounded to the nearest million square miles.)
Use the information in the graph to answer questions 608 - 612.

608. The area of the Arctic Ocean represents 3.8 percent of the total area of the six bodies of water. Find the area of the Arctic Ocean. Round your answer to the nearest million square miles.

_____ million sq. miles

. . . . . .

609. Find the central angle measure of the sector representing the Pacific Ocean. Round your answer to the nearest degree.

_____ degrees

. . . . . .

610. Find the area of the Indian Ocean. Round your answer to the nearest million square miles.

_____million sq. miles

. . . . . .

611. The central angle measure of the sector representing the Caribbean Sea is 2.7 degrees. Express the area of the Caribbean Sea as a percent of the total area of the six bodies of water. Do not round your answer.

_____ percent

. . . . . .

612. Scientists have determined that a satellite orbiting Earth is now out of control and is about to fall. It could fall anywhere on Earth. The probability that it will fall into the Pacific Ocean is 1.94 times the probability that it will fall into the Atlantic Ocean. Find the area of the Atlantic Ocean. Round your answer to the nearest million square miles.

_____ million sq. miles

. . . . . .

613. A farmer needs to fence some of her land to make a rectangular field. She wants the length of the field to be 60 feet longer than the width. She has 600 feet of fencing material. What should be the width of the field?

_____ feet

. . . . . .

614. Today is the birthday of Katie, Zane, and Jenny. Katie is twice as old as Zane. Zane is two years younger than Jenny. The sum of the ages of the three children is 30. How old is Jenny?

_____ years old

. . . . . .

615. I'm thinking of a number. When I multiply that number by 3 and then subtract 8, I get the same result as when I multiply that number by 2 and add 4. What number am I thinking of?

_____

. . . . . .

616. A palindrome is a counting number that reads the same backward as it does forward. For example, 1551 and 777 are palindromes. How many three-digit palindromes are divisible by 5?

_____

. . . . . .

617. A bag contains red, yellow, and white marbles. All are the same size and shape, and the probability of selecting a red marble is $\frac{2}{3}$. Four red marbles are added to the bag, making the probability of selecting a red marble $\frac{3}{4}$. How many red marbles were in the bag to begin with?

_____ red marbles

. . . . . .

618. Find 125% of 75% of 200.

_____

. . . . . .

619. Darius, Cindy, and Signe went shopping. Darius spent $15.00 more than Cindy. Cindy spent $15.00 more than Signe. Altogether, they spent $106.50. How much did Darius spend?

$ _____

. . . . . .

620. Jasmine arranged five different counting numbers on a list from smallest to largest. She noticed the following: The first number on the list was 5. The median was 11. The fourth number was 16. The average of all five numbers was 12. What is the largest possible value for the fifth number on Jasmines' list?

_____

. . . . . .