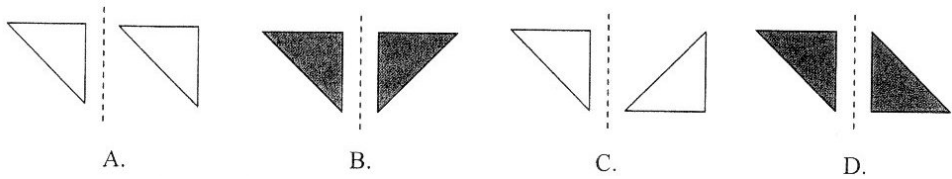
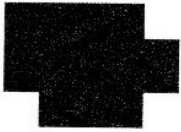


187. Which one of the four figures below shows a pair of triangles that are reflections of one another across the dotted line?



\_\_\_\_\_

188. Shanna has a rectangular piece of cardboard that measures 8 cm wide and 10 cm long. She cuts a 2 cm by 2 cm square out of three of the corners, as shown below. What is the perimeter of the resulting shape?



\_\_\_\_\_ cm

189. When I subtract 6 from my favorite number, then divide the difference by 3, and finally add 12 to this result, the answer is 20. What is my favorite number?

\_\_\_\_\_

190. Abe, Bob, Carl, Don, and Ed each have a different coin. The coins are a penny, a nickel, a dime, a quarter, and a silver dollar. Abe's coin is worth ten times as much as Bob's coin. Carl's coin is worth more than Abe's coin and less than Don's coin. Who has the nickel?

\_\_\_\_\_

191. If two sides of a triangle measure 6 inches and 10 inches, the measure of the third side of the triangle could not be:

- A. 3 inches    B. 8 inches    C. 10 inches    D. 15 inches

\_\_\_\_\_

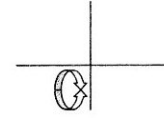
192. Mickey has two pet mice, Peppy and Squeaky. Peppy's tail is 5.3 cm long. Squeaky's tail is 8 mm shorter than Peppy's tail. How many centimeters long is Squeaky's tail?

\_\_\_\_\_ cm

193. Last night Juan spent twice as much time on his geography homework than on his math homework. He spent 6 minutes less on his science homework than on his math homework. Juan spent 1 hour 12 minutes on his geography homework. How much time did Juan spend altogether last night on math, geography, and science homework?

\_\_\_\_\_ hours \_\_\_\_\_ minutes

194. The shape to the right is first reflected about the vertical line and this result is then reflected about the horizontal line. Which one of the pictures below shows the final result?



- A. B. C. D.

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

\_\_\_\_\_

195. Write the expression below as a decimal number.

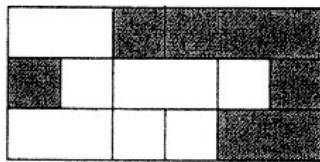
Three hundred twenty and seven thousandths.

\_\_\_\_\_

196. Zane was paid \$46.00 for 8 hours of work today. At this same rate, how much should he get paid for 6 hours of work tomorrow?

\$ \_\_\_\_\_

197. All of the small squares shown in the figure below are congruent. What percent of the figure is shaded? Round your answer to the nearest tenth of a percent.



\_\_\_\_\_ %

198. A package of 12 hot dogs costs \$1.99. A package of 8 hot dog buns costs \$1.59. Melanie is planning a picnic for 24 people. She assumes that, on the average, each person will eat 2 hot dogs and 2 buns. She's planning on having enough food but does not want any food left over. How much should Melanie plan to spend on hot dogs and buns? Assume that there will be no sales tax charged.

\$ \_\_\_\_\_

199. Regi bought a shirt and a pair of pants. The shirt had a regular selling price of \$30 and was on sale for 25% off. The pants had a regular selling price of \$24 and were on sale for 20% off. How much did Regi pay for the shirt and pants? Assume there was no sales tax charged.

\$ \_\_\_\_\_

200. Which of the expressions below represents the smallest number?

- A. 20% of 10    B.  $\frac{2}{3}$  of 4    C. 45% of 3    D.  $\frac{3}{8}$  of 5    E. 2.03

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

\_\_\_\_\_

.....  
201. According to the scale on a map, each  $\frac{1}{2}$  inch on the map represents an actual distance of 10 miles. Mathtown and Smartville are  $4\frac{3}{8}$  inches apart on the map. What is the actual distance between Mathtown and Smartville?  
\_\_\_\_\_ miles

.....  
202. Belinda arranged all her dolls for a tea party. When she arranged them in pairs, there was one doll left over. When she arranged them in groups of three or groups of four, there was one doll left over each time. She finally seated them in groups of five and there were no dolls left over. Assuming Belinda does not have more than 50 dolls, how many does she have?  
\_\_\_\_\_ dolls

.....  
203. Tom said: I have 2 quarters, 3 nickels and some dimes in this sack. How many dimes are in the sack?  
Tim said: I don't know. I need some more information.

Tom said: If you were to randomly select one coin at a time and not replace it, you would need to select at least 10 coins to be sure to get a nickel. How many dimes are in Tom's sack?  
\_\_\_\_\_ dime(s)

.....  
204. Rush's list consists of 4 counting numbers. While examining the 4 numbers, he correctly observes the following:  
\* their mean is 8,  
\* their median is 8, and  
\* their mode is 8.

The smallest number is **S** and the largest number is **L**, with **L** greater than **S**. What is the largest possible value of **S**?  
\_\_\_\_\_

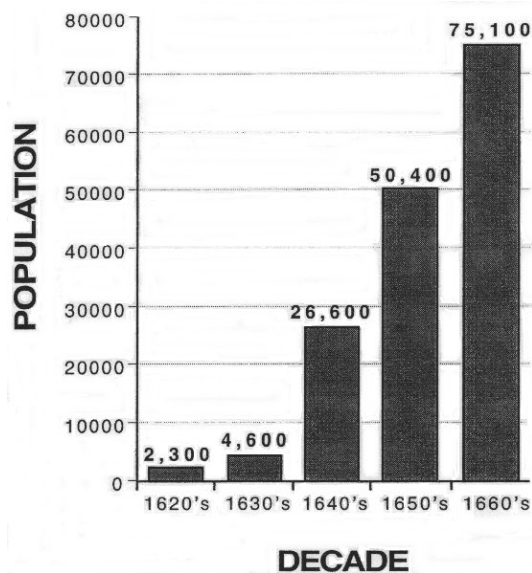
.....  
205. Each of the two-digit counting numbers is written individually on identical pieces of paper and placed in an empty bag. After the bag has been thoroughly shaken, one piece of paper is randomly selected. Find the probability that this piece of paper contains a number that is divisible by both 3 and 7. Write your answer as a fraction in simplest form.  
\_\_\_\_\_

.....  
Use the following information to answer questions 206 and 207.  
30 students took a math quiz.  
20 percent of the students obtained a score of 4,  
10 percent obtained a score of 6,  
and each of the remaining students obtained a score of 8.

206. Find the mean quiz score.  
\_\_\_\_\_

.....  
207. Find the median quiz score.  
\_\_\_\_\_

The bar graph below shows the population in Colonial America by decade from the 1620's through the 1660's.



Use the information in the graph to answer questions 208 - 210.

208. In which decade did the population increase 100 percent over the previous decade?  
\_\_\_\_\_

209. Express the increase in population from the 1630's to the 1640's as a percent of the 1630's population. Round your answer to the nearest percent.

\_\_\_\_\_ percent

210. The population in the 1670's was 49 percent greater than the population in the 1660's. Find the population in the 1670's. Round your answer to the nearest hundred.

\_\_\_\_\_

211. The square base of the Great Pyramid in Egypt has a perimeter of 922.4 meters. What is the area of the base? Round your final answer to the nearest square meter.

\_\_\_\_\_ square meters

212. Adam wrote down the largest four-digit number that is divisible by 3. Next he wrote down the smallest four-digit number that is divisible by 3. What is the sum of these two numbers?

\_\_\_\_\_

213. Megan has 24 square tiles, all the same size. The side of each tile measures 6 inches. Megan pushes the 24 tiles together to make a rectangle that has no gaps or overlaps. She builds the rectangle with the largest possible perimeter. What is this perimeter?

\_\_\_\_\_ inches

214. I have only red marbles, blue marbles, and yellow marbles. All but 5 of my marbles are red. All but 6 of my marbles are blue. All but 7 of my marbles are yellow. How many blue marbles do I have?

\_\_\_\_\_ blue marbles

.....

215. Last weekend Marcy, Paul, Andy, and Joan all did homework.  
 Marcy spent 1 hour and 6 minutes on her homework. Paul spent half as long as Marcy on his homework. Andy spent twice as long as Marcy on his homework. Joan spent one-third as long as Paul on her homework. How many more minutes did Andy spend on homework than Joan?  
 \_\_\_\_\_ minutes

.....

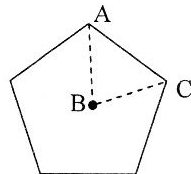
216. Bobby and his mother decided to make a paper chain during the month of June. They made 1 loop on June 1st, added 2 loops on June 2nd, added 3 loops on June 3rd, etc. They continued this pattern through June 30th, when they added the final 30 loops to the chain. How many loops were in the paper chain made in June?  
 \_\_\_\_\_ loops

.....

217. A container of juice holds 10 fluid ounces, which is 295 ml. How many ml of juice would a 16-fluid ounce container hold?  
 \_\_\_\_\_ ml

.....

218. In the pentagon below, all five sides have the same length and all five angles have the same measure. Point B is the center of the pentagon. What is the measure of angle ABC?



\_\_\_\_\_ degrees

.....

219. I am thinking of a two-digit odd number. When I divide my number by 6 or by 7, I get a remainder of 1. The number is not a prime number. What is my number?  
 \_\_\_\_\_

.....

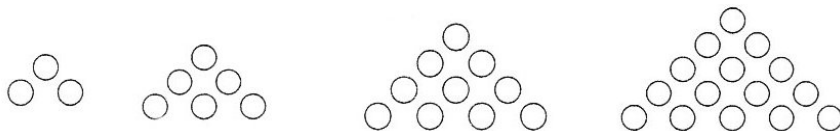
220. Greg, Hal, Ron, Lucy, Jane, and Patti rented two canoes and went canoeing. Each canoe had 3 people. Greg watched Hal paddle the other canoe. Lucy and Ron were in the same canoe. Both Ron and Hal sat in the front in their canoes. Who was in the same canoe as Patti?

- A. Greg      B. Ron      C. Jane      D. Lucy

\_\_\_\_\_

.....

221. Tyrone is building triangles out of nickels. The first four triangles are shown below.



Note that after the first triangle, the bottom row of each triangle has one more nickel than the bottom row of the previous triangle. What is the value of the nickels in the tenth triangle?

\$ \_\_\_\_\_

.....  
222. Aaron wrote down his favorite fraction. The sum of the numerator and denominator is 96. The ratio of the numerator to the denominator is 3 to 5. What fraction did Aaron write down?  
Fact: Aaron's fraction was not in simplest form.

\_\_\_\_\_

.....  
223. Joe sold a football and a baseball bat for \$24. The price of the football was 40% more than the price of the baseball bat. What was the price of the football?

\$ \_\_\_\_\_

.....  
224. Jane always runs at a rate of 6 miles per hour and always walks at a rate of 3 miles per hour. On Thursday, she ran for 20 minutes and walked the rest of the time. Altogether, she went a distance of 3.5 miles. For how many minutes did Jane walk on Thursday?

\_\_\_\_\_ minutes

.....  
225. Melody subtracted 20% of 6.8 from 9.4. What answer should Melody get?

\_\_\_\_\_

.....  
226. I'm thinking of a two-digit number. Both digits are perfect square numbers. My number is 1 more than a multiple of 6. If I reverse the digits, the new number is 1 more than a multiple of 5. What two-digit number am I thinking of?

\_\_\_\_\_

.....  
227. A rectangle is 12 cm long and 8 cm wide. The length is decreased by 25% and the width is increased by 25%. What is the area of the new rectangle?

\_\_\_\_\_ square cm.

.....  
228. The average human tongue has 9,000 taste buds. Jason bit into a very hot piece of pizza and burned  $\frac{3}{5}$  of his taste buds. How many taste buds were not burned?

\_\_\_\_\_ taste buds

.....  
229. Rene counted the coins she earned selling lemonade. Half of the coins were quarters,  $\frac{3}{8}$  were nickels, and the remaining 12 coins were dimes. What is the value of the coins Rene earned?

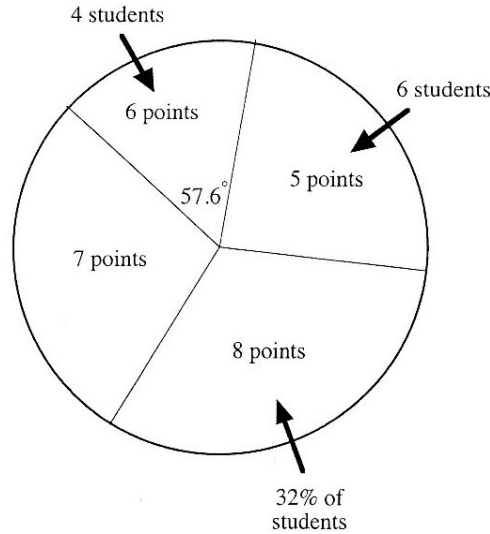
\$ \_\_\_\_\_

.....  
230. A rectangular piece of fabric measures  $1\frac{1}{3}$  yards by 2 yards. Each square foot of the fabric costs \$1.25. What is the cost of the piece of fabric?

\$ \_\_\_\_\_

.....

The circle graph below shows the distribution of 25 student scores on a 10-point history quiz.



For example: The graph shows that 6 of the 25 students obtained a quiz score of 5 points and 32% of the students obtained a quiz score of 8 points.

Use the information in the graph to answer questions 231 - 234.

231. What percent of the students obtained a quiz score of 6 points?

\_\_\_\_\_ percent

232. What percent of the students obtained a quiz score greater than 5 points?

\_\_\_\_\_ percent

233. How many students obtained a quiz score of 7 points?

\_\_\_\_\_ students

234. What is the measure of the central angle for the sector labeled **8 points**?

\_\_\_\_\_ degrees

Use the following information to answer questions 235-237.

Sue uses a 4-character identification system to label her pet earthworms. Each label has two different vowels (A, E, I, O, U) followed by two different numerals (1-9).

**Note:** \* No vowels or numerals are repeated in the same label.

\* Zero is not used in any label.

235. How many possible labels end with **1 2**? Note: These labels look like this: \_\_\_ \_\_\_ **1 2**

\_\_\_\_\_ labels

236. How many possible labels begin with **A E**? Note: These labels look like this: **A E** \_\_\_ \_\_\_

\_\_\_\_\_ labels

237. How many possible labels begin with A E and end with an even numeral?

Note: these labels look like this A E \_ □, where □ is an even numeral.

\_\_\_\_\_ labels

238. Zoa's list consists of 8 different even counting numbers. The mean of the 8 numbers is 16. What is the largest possible number in her list?

\_\_\_\_\_

.....  
Use the following information to answer questions 239 and 240.

A bag contains 12 white marbles, 6 blue marbles, and some red marbles. The marbles are of the same size and shape. The probability of randomly selecting a white marble is  $\frac{1}{3}$ .

239. What is the probability of randomly selecting a blue marble? Write the answer as a fraction in simplest form.

\_\_\_\_\_

240. How many red marbles are in the bag?

\_\_\_\_\_ red marbles

241. Twenty percent of the value of the money in Olivia's piggy bank was in nickels. The rest of the coins totaled \$9.80. How much money did Olivia have in her piggy bank?

\$ \_\_\_\_\_

242. Mr. Duran goes to the neighborhood newsstand every day to buy a paper. The chart below shows the prices for the newspaper that Mr. Duran buys.

	Newsstand price	Subscription price
Monday through Saturday	\$0.95 per day	\$0.80 per day
Sunday	\$1.50	\$1.30

If July 1 falls on a Sunday, how much money would he save in July if he subscribed to the paper instead of buying it at the newsstand? Fact: July has 31 days.

\$ \_\_\_\_\_

243. Aunt Emma bought 2.3 pounds of cashew nuts for \$12.88. At this rate, what would she pay for 1.7 pounds of cashew nuts?

\$ \_\_\_\_\_

244. Ramon, Pete, and Sam scored a total of 66 points in the basketball game. Ramon scored 17 points. Sam scored 9 points more than Pete. How many points did Pete score?

\_\_\_\_\_ points

245. The average weight of a hummingbird is 0.7 ounces. It takes 3200 average hummingbirds to equal Bill's weight. It takes 4480 average hummingbirds to equal Jim's weight. How many more pounds does Jim weigh than Bill? Fact: 1 pound = 16 ounces.

\_\_\_\_\_ pounds



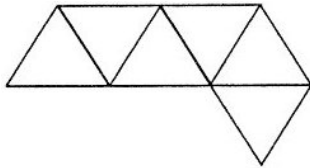
246. The temperature dropped from  $12^{\circ}$  Celsius to  $-8^{\circ}$  Celsius overnight. How many degrees Fahrenheit did the temperature drop overnight? Fact:  $F = \frac{9}{5}C + 32$

\_\_\_\_\_  $^{\circ}$  F

.....  
247. Two numbers are reciprocals of each other if their product is 1. What is the reciprocal of 3.5? Write your answer as a fraction in simplest form.

\_\_\_\_\_

.....  
248. The shape below is made up of exactly six congruent equilateral triangles. The perimeter of the shape is 104 cm. What is the perimeter of one of the equilateral triangles?



\_\_\_\_\_ cm

.....