



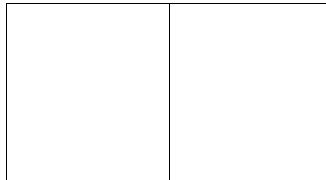
Instructions: Problems 1 – 10 are multiple choice and count towards your team score. Bubble in the letter on your answer sheet. Be sure to erase all mistakes completely.

- Which of the following numbers is read aloud as “six hundred nine thousand, thirty-five”?
A. 609,035 B. 69,035 C. 609,305 D. 690,035 E. 60,935
- Which of the following would be the cheapest to buy?
A. Four apples at \$0.87 each B. Eight kiwis at \$0.47 each
C. Six oranges at \$0.49 each D. Three pears at \$0.50 each
E. Ten carrots at \$0.30 each
- The volume of a community swimming pool would most likely be reported in which unit of measurement?
A. kilograms B. gallons C. inches D. teaspoons E. meters
- If you roll three fair six-sided dice, and the first two dice rolled land as a “1” and a “5”, what is the probability the third die will land as a “3”?
A. $\frac{1}{36}$ B. $\frac{1}{6}$ C. $\frac{1}{3}$ D. $\frac{1}{2}$ E. $\frac{2}{3}$
- On his final math test, a student who answered 49 questions correctly scored 70%. If each question is weighted equally, how many questions total were on the test?
A. 7 B. 34 C. 64 D. 70 E. 83
- Which of the following shapes *cannot* have two pairs of parallel sides?
A. rhombus B. parallelogram C. rectangle
D. square E. none of these
- How many $2\text{in} \times 2\text{in} \times 2\text{in}$ cubes can fit into a $4\text{in} \times 4\text{in} \times 6\text{in}$ rectangular prism?
A. 2 B. 6 C. 8 D. 12 E. 48
- Four out of the five choices below are equivalent to each other. Which one is not equivalent?
A. 82.5% B. 0.0825 C. $\frac{33}{40}$ D. 82.5:100 E. $\frac{825}{1000}$
- Which one of the following numbers is prime?
A. 111 B. 243 C. 251 D. 708 E. 921
- Which of the following statistics is the greatest for the following list of data?
2, 4, 4, 4, 5, 6, 11, 14, 15
A. mean B. median C. half the range D. mode E. all are equal



Problems 11 – 30: Bubble in your answers on the answer sheet. Be sure to erase all mistakes completely. You do not need to bubble in leading zeros – the answer of “7” does not need to be answered as “007”. If your answer is a fraction like $\frac{3}{16}$, bubble in 316. For decimal answers like 3.14, bubble in 314.

11. Calculate the following expression: $6 + 3 \times 2 - 4 \div 2$.
12. How many lines of reflectional symmetry does a hexagon have?
13. In a poll of her classmates about their favorite school subjects, Marnie found that 15 students chose mathematics, 10 chose history, and 10 chose art. If she decided to randomly select a classmate, what is the probability that his/her favorite subject was mathematics? **Express your answer as a reduced fraction.**
14. Christopher has 30 yards of material that he wants to give to his friends so that each friend can create one lanyard. If it takes 6 feet of the material to create a lanyard, how many friends will he be able to provide the materials for?
15. Shown below are two squares that have been joined together so that they share one side and thus form a rectangle. If the perimeter of the rectangle is 36 inches, what is the area of the rectangle in square inches?



16. What is the next number in the following sequence?
2, 6, 11, 17, 24, 32, 41, ...
17. Solve for x : $3x + 2 = 38$.
18. The amount of drinking water that is consumed by the people of Bellingham is about 10 million gallons per day. Assuming there are 80,000 people in Bellingham, how much water does the average person consume in one week? **Express your answer as a whole number of gallons.**
19. The average SAT score of eleven students was 2,000. When Mary's score was added to the other eleven scores, the average went up to 2,010. What is the positive difference between her score and the initial average score?



20. MaryAnne gets a 10% increase in monthly salary each year. If her current monthly salary is \$1,000, what was her monthly salary two years ago? **Express your answer to the nearest dollar.**
21. The lock on your diary allows you to set a three-digit combination. To make it harder on the rest of your family though, you decide that each digit must be different. How many possible combinations do you have to choose from?
22. Suppose that Michael Jordan, a famous basketball player, has just finished playing a game, and scored 53 points. If he made 21 total shots, some of which were worth two points, and the rest of which were worth three points, how many three-point shots did he make?
23. How many perfect squares between 1 and 600 are divisible by four?
24. In order to expand a rectangular building, a construction crew is going to increase each side length of the floor by 20%. By what percentage will the area of the floor increase? **Express your answer to the nearest whole percent.**
25. Call a triangle “cutesy” if it is an acute triangle and the degree measures of all three of its angles are distinct whole numbers. What is the largest possible positive difference between the degree measures of the largest and smallest angles in a “cutesy” triangle?
26. In a flight from Seattle to Los Angeles, a plane flew an average speed of 200 miles per hour. Because of a tail wind, the plane was able to fly back to Seattle at an average speed of 250 miles per hour. If the plane flew 1,000 miles each direction, what was the plane's average speed, in miles per hour? **Express your answer to the nearest integer.**
27. If **A** is the set of all positive integers, and **B** is the set of all two-digit prime numbers less than 60, how many elements are in the set $A \cap B$?
28. In how many ways can the letters in the word “BUBBLE” be uniquely arranged?
29. If the complement of an angle is two-fifths of its supplement, what is the degree measure of the angle?
30. A league of only four basketball teams decided that playing each other once would not make a long enough season. So they decided that each team would play every other team four times. How many games will the season last now?