

School Name _____

Math Superbowl - 2014

6th Grade Team Test

Answer Sheet

1. _____ %

2. _____ squares

3. _____ rectangles

4. _____ boxes

5. Name Last snack animal souvenir

Rachel _____ _____ _____ _____

Rick _____ _____ _____ _____

Abbey _____ _____ _____ _____

Mark _____ _____ _____ _____

Jayne _____ _____ _____ _____

Name _____ School _____

Math Superbowl - 2014
6th Grade Individual Part II
Answer Sheet

1. _____ points

2. _____, _____, _____

3. _____ (1st, 2nd, 3rd, 4th, 5th, 6th)

4. _____ (letter)

5. _____ minutes

School Name _____

Math Superbowl - 2014

5th Grade Team Test

Answer Sheet

1. _____ (letter)

2. _____ red, _____ green

3. _____ blue squares

4. _____ rectangles

5. Name Coach City Color

United _____ _____ _____

Arsenal _____ _____ _____

Express _____ _____ _____

Premier _____ _____ _____

Fusion _____ _____ _____

Name _____ School _____

Math Superbowl - 2014
5th Grade Individual Part II
Answer Sheet

1. ___ pennies, ___ nickels, ___ dimes, ___ quarters

2. ___, _____, _____

3. _____ of the cookies (must be a fraction)

4. _____ of the original square (must be a fraction)

5. ___:_____ (actual arrival time)

School Name _____

Math Superbowl - 2014

4th Grade Team Test

Answer Sheet

1. _____ - _____

2. \$_____ football, \$_____ soccer ball, \$_____ basketball

3. _____ possible combinations

4. _____ rectangles

5. Name Fruit Resting Place

Doug _____ _____

Heather _____ _____

Jen _____ _____

Steve _____ _____

Name _____ School _____

Math Superbowl - 2014

4th Grade Individual Part II

Answer Sheet

1. _____ boys

2. A = _____, B = _____, C = _____

List all the other possible solutions below. (A=_ B=_ C=_)

3. _____ numbers

4. _____ chickens

5. _____ times

Math Superbowl - 2014

6th Grade Team Test

5 questions in 30 minutes with calculators done in groups of up to 4 students

Only answers on the answer sheet will be counted

1. Mr. Kent, the Math teacher, gives 100 points each week during a 11-week grading period. At the end of the eighth week, Shanna has a 77% average. What is the lowest 3 week average score she can receive during the remainder of the grading period in order to raise her average to 80% for the term?
2. How many 1 by 1 squares are in figure 8 in this pattern?



Figure 1

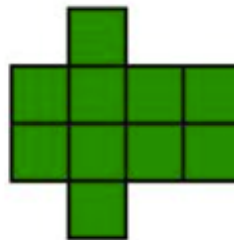


Figure 2

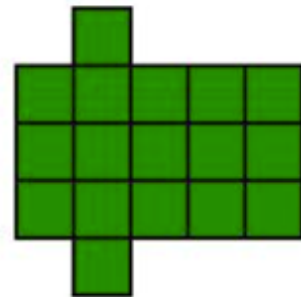


Figure 3

3. What is the total number of rectangles of all sizes that can be traced using the lines in this diagram?

4. Cube shaped boxes will be loaded into the cargo hold of a truck. The cargo hold of the truck is in the shape of a rectangular prism. The edges of each box measure 1.8 feet and the dimensions of the cargo hold are 7.5 feet high, by 7.5 feet wide, by 15 feet long. How many boxes will fit in the cargo hold of the truck?

Math Superbowl - 2014

6th Individual Test Part II

5 questions in 30 minutes with calculators

Only answers on the answer sheet will be counted

1. A circle and a triangle are drawn on the same sheet of paper. What is the greatest number of points where the two figures can intersect?
2. Using each digit 0 through 9 no more than once, what is the smallest 7-digit number you can make without consecutive digits next to each other.
(For example, 5 can not be next to 4 because 4 and 5 are consecutive numbers)
(The zero cannot be in the millions place.)
3. There are 6 people (Ben, Rachel, Yen, Greg, Oscar, and Tim) standing in line at an amusement park. Use the clues to determine Yen's position in line (1st, 2nd, 3rd, 4th, 5th, or 6th).

Ben is closer to the front than the person who is 3rd in line.

Rachel is only next to Oscar and no one else.

Greg is an odd number greater than 1st.

Tim is before Ben.

4. 

Letters A through J are equally spaced on the number line above and represent integers. If the letter D is zero on the number line, what letter represents the sum of B + G?

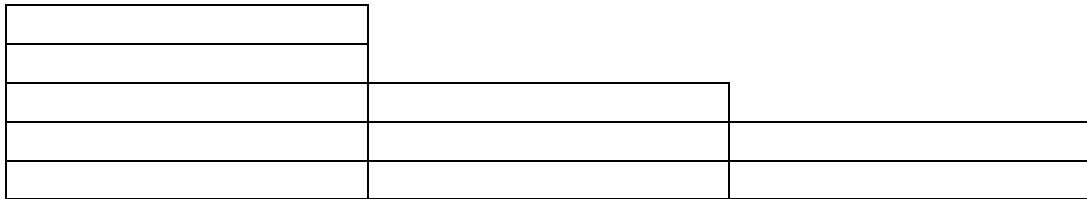
5. Brian trains on a 6 mile track. He bikes at a constant rate. In his last day of training, Brian bikes 3 and 4/5 laps in 114 minutes. At the same rate, how long will it take Brian to complete a 50 mile ride?

5. Teams from around the United States are meeting in Arizona for a soccer tournament. Each team came from a different city. Use the clues to determine the name of each team, their coach, their home city, and their team color.
- The white team with a female coach and Premier with a male coach both arrived a day early.
 - The red team with a male coach arrived late. Their flight from Seattle was delayed.
 - The yellow team from Los Angeles and the white team called United, played each other for their first game.
 - Juan, who is the Arsenal coach, does not live in Seattle. Angela does not live in Rapid City.
 - The team coached by Betsy, the Fusion, the team coached by Steve, the blue team, and the team from Charlotte all attended an Arizona Diamondbacks game after the tournament was over.
 - The coach for Express was asked if her team was the green team that finished in second place. "No, he's their coach, and they are from Boston," she said. "I'm from Los Angeles."
 - On Monday, Express and the team coached by Mike returned home. The team coached by Juan, the green team, and the team coached by Angela returned home on Tuesday.

	Betsy	Mike	Juan	Angela	Steve	Seattle	Los Angeles	Boston	Rapid City	Charlotte	red	yellow	green	blue	white
United															
Arsenal															
Express															
Premier															
Fusion															
red															
yellow															
green															
blue															
white															
Seattle															
Los Angeles															
Boston															
Rapid City															
Charlotte															

3. Mrs. Fulgham's class has volunteered to cut 1 inch x 1 inch squares of four colors: yellow, green, red, and blue. These 1 inch x 1 inch squares will be used to make a larger square measuring 8 inches x 8 inches. The directions stated the quantity needed for each color was: $\frac{1}{8}$ yellow $\frac{3}{8}$ green $\frac{3}{16}$ red and the rest blue. How many 1 inch x 1 inch squares of blue will be needed for the 8 inch x 8 inch square?

4. What is the total number of rectangles of all sizes that can be traced using the lines in this diagram?



Math Superbowl - 2014

5th Grade Team Test

5 questions in 30 minutes with calculators done in groups of up to 4 students

Only answers on the answer sheet will be counted

1. The letters A through I stand for the numerals 1 through 9. Using the following clues, determine the answer to the following problem.

$$E + D = \text{ ____ } \text{ (letter)}$$

Clues

$$A \times A = GA$$

$$G \times B = A$$

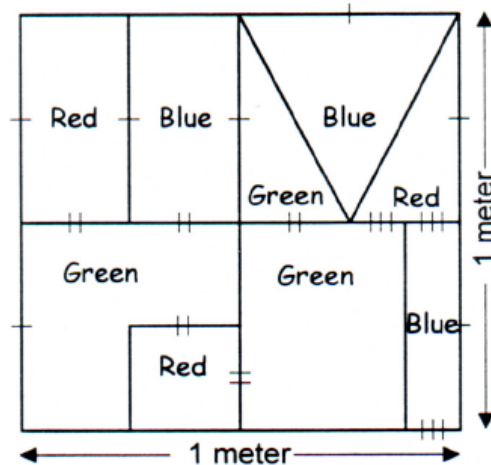
$$I \times B = H$$

$$A \div D = A$$

$$F \div G = G$$

$$F - C = B$$

2. You are planning on building a window using the following design below measuring 1 meter x 1 meter. How many square meters of red glass will be used in the window? Green glass?



Math Superbowl - 2014

5th Grade Individual Test Part II

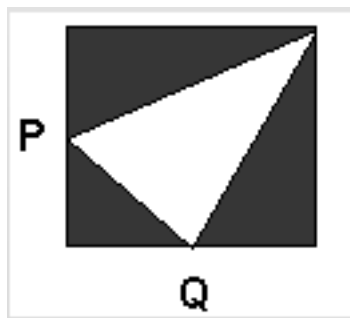
5 questions in 30 minutes with calculators

Only answers on the answer sheet will be counted

1. Carl has 10 coins in his pocket. He has at least one penny, one nickel, one dime, and one quarter. His coins add up to 56 cents. How many of each coin does he have?
2. Using one set of digits 0 through 9 (no digit can be used more than once), what is the largest 7 digit odd number you can make with more than half of the digits being less than 6 and the digit in the ten thousand's place is not odd.
3. Orlando shared 24 cookies among his 4 teachers as follows:
 - Mr. Kent received $\frac{1}{3}$
 - Mrs. Fulham received $\frac{1}{4}$
 - Ms. Escobar received more than 3 cookies.
 - Mr. Prado received more cookies than Ms. Escobar.

What fraction of the total cookies did Ms. Escobar receive?

4. A white triangle was placed on top of a gray square. P and Q are midpoints of the original gray square. What fraction of the square did the white triangle cover?



5. The Math Superbowl competition starts at 8:30 am sharp. Stacy's watch is 15 minutes slow but she thinks it is 10 minutes fast. Stacy left her house so that she would arrive right at 8:30. What actual time did she arrive at the competition?

Math Superbowl - 2014

4th Grade Team Test

5 questions in 30 minutes with calculators done in groups of up to 4 students

Only answers on the answer sheet will be counted

1. Joe is trying to remember Tyler's phone number without its area code. He knows that the sum of all the digits in his number is 38. He remembers that the first and the third digits are an 8. The fourth and fifth digits are consecutive numbers that add up to 5 with the smaller of the two digits coming first. The last 2 digits are the same. The second digit is the largest digit. What is Tyler's phone number?
2. A football, soccer ball, and a basketball together cost \$61. Three footballs and a soccer ball together cost \$54. A football and a soccer ball together cost \$30. How much does each ball cost?
3. Emi had a quarter and a dime. She exchanged her coins for some other coins worth the same amount. How many different combinations of coins are possible? (Do NOT count the quarter and dime that she started with as one of the possible combinations)
4. What is the total number of rectangles of all sizes that can be traced using the lines in this diagram?



Math Superbowl - 2014

4th Grade Individual Test Part II

5 questions in 30 minutes with calculators

Only answers on the answer sheet will be counted

1. There are 85 students in the 1st grade at Peach Hill School. There are 9 more girls than boys. How many boys are in 1st grade?

2. Find the values for A, B, and C so that each letter represents a **different** single digit numeral and **can NOT be 2**. List all the possible solutions.

$$\begin{array}{r} B A \\ + 2 A \\ \hline C B \end{array}$$

3. How many numbers from 1 to 190 contain the numeral 7?
4. A farm has pigs and chickens. Together they have 58 eyes and 92 legs. How many chickens are on the farm?
5. At certain times in a day, the hour hand and the minute hand on an analog clock form a right angle. How many times will the hour hand and the minute hand form a right angle between 12:00 noon and 12:00 midnight?