

**Smiley Face Math
Grade 5, Worksheet IX**

Name: _____



1. Bryan’s baseball team and their families are attending the Tampa Bay Rays’ opening game. Each ticket costs \$45. Bryan is collecting money to buy the tickets for the entire group. He has collected \$2,520 and goes to buy the tickets. How many tickets is Bryan able to purchase with the money he has collected? _____

Explain how you came to your answer:



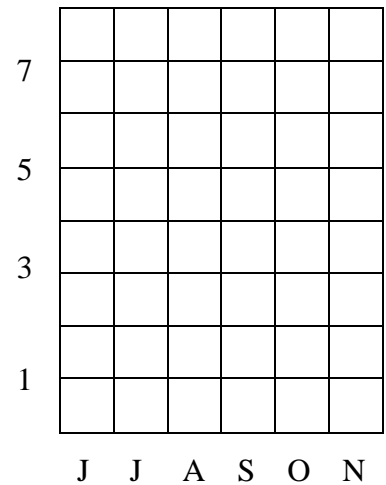
2. Look at the data in the chart below. Create a line graph using the data. Use the middle of each month to plot the rainfall. Remember that line graphs are great to see data change over a period of time.

Rainfall in Florida

Month	Inches
June	7.3
July	6.8
August	6.3
September	5.8
October	2.9
November	2.3



Between what two months is there the greatest difference in rainfall?
_____ and _____



Be sure to:

- title the graph
- write the numbers for the scale
- label both horizontal and vertical axes
- accurately graph the data



3. Lauren walked $1\frac{1}{2}$ miles to her friend’s house, and then they both walked $1\frac{3}{4}$ miles to the mall. They took the bus home. How far did Lauren walk altogether? _____



☺ ☺ ☺ 4. You are planning a party before you start 5th grade. At the store, you want to buy the following items:

- Soda: \$1.79
- Water: \$2.14
- Brownies: \$2.97
- Fruit: \$10.37
- Hot Dogs: \$4.05
- Hot Dog Buns: \$0.88

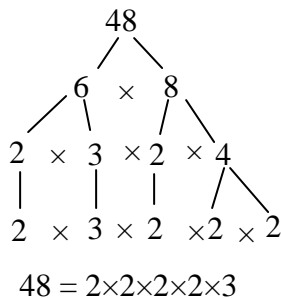


- a) Since you don't want to bring your calculator in the grocery store with you, round each item to the nearest dollar. What's the estimated total? _____
- b) Is the \$20 bill you brought enough? _____ Why or why not?
- c) Now find the exact cost. _____

☺ ☺ ☺ 5. A *prime number* is a number that has only 1 and itself as factors. No other numbers divide into it without a remainder. Circle all of the numbers below that are *prime numbers*.

14 5 7 21 23 45 2 9 39

☺ ☺ 6. *Prime factorization* is finding all of the prime factors of a certain number. To help you find them, try using a *factor tree* like this one for 48.



Find any two factors of 48.

Find factors of those two factors.

Keep factoring until all the factors at the bottom of the tree are prime.

Write 48 as the product of prime factors.

Try these two. Write the *prime factorization* of 45 and of 36. 45 = _____ 36 = _____

☺ ☺ 7. From the problem above, you know that $48 = 2 \times 2 \times 2 \times 2 \times 3$. You learned in Worksheet II to write such a number using *exponents*. So $48 = 2^4 \times 3$ is a short way to write the prime factorization. Write the prime factorization of 45 and 36 using exponents.

45 = _____ and 36 = _____