

Problempalooza!

Julie spent one third of her birthday money, then lost half of the rest. She now has \$10 left. How much money did she get for her birthday? Explain your thinking.

Problempaluz

1. We want to plan a 5th grade pizza party. Ms. Clements' class has 23 students. The other fifth grade class has 23 students. A medium pizza costs \$11. If we order 18 medium pizzas, with 8 slices in each pizza, how many slices of pizza will each fifth grader get to eat?

2. Ms. Smith is building a multiple tower using 12s. She has come up with the following pattern using her tower:

120 240 360 _____ _____ _____ _____

What are the next 4 numbers in her pattern. How do you know?

3. Place grouping symbols (parentheses and/or brackets) where they go to make this problem true:

$$30 \times 9 + 1 \times 15 - 12 = 900$$

4. How can you turn over a glass full of water without spilling any of the water? You may not put a lid on it.

Problempalooza!

1. **Identify** the information that is given to answer the questions. **Explain** how this information is useful using complete sentences. What other information is needed to solve each problem? Why? Answer in complete sentences.

2. Jasmin and Niomi are selling cupcakes in a bake sale. Jasmin has sold 36 cupcakes and Niomi has 15 cupcakes left to sell. How many cupcakes has Niomi sold? How many cupcakes does Jasmin have left to sell?

3. I am planning a birthday party for my sister. She is turning 12 years old. I want to invite 10 of her friends to the movies at 3:00pm. Each movie ticket costs \$9. My mom gave me \$145 to spend on the party. If my sister, her friends and I all go to the movies, how much money is left over for popcorn and soda?

4. Complete the pattern:

J, F, M, A, M, J, __, __, __, __, __, __.

5. Where does $10 + 3 = 1?$

Problempalooza!

October 25, 2012

1. Mr. O (our principal) won the lottery!!! And great news! He wants to share his money with the 5th graders at Howell elementary school!!! For this problem, we pretend that we have 25 lockers outside of our classroom.

Mr. O gives each student a stack of dollars to place in the lockers.

- The first student places \$1 in each locker, including her own.
- The second student places \$1 in every second locker, starting with locker number 2. (He places \$1 in locker number 2, \$1 in locker number 4, \$1 in locker number 6, ...)
- The third student places \$1 in every third locker, starting with locker number 3. (She places \$1 in locker number 3, \$1 in locker number 6, \$1 in locker number 9, ...)
*And so on.
- Lastly, the 25th student places \$1 in locker number 25.

Which locker would you choose? How much money will be in that locker?
Which locker will have the least amount of money in it?

2. Complete the pattern:

M, T, W, T, ____, ____, ____.

3. Write a word problem to go with the math statement $(9+2) \times 12$.

4. Solve the multiplication problem efficiently. Use clear and concise notation.

a. Use each digit once to fill in the spaces below so that your answer is between 6,000 and 6,500.

3 1 2 6 0

_____ X _____

b. Find the exact answer to the problem above. Show how you solved it.

Problempalooza!

November 8, 2012

1. Write four bars of 4/4 using any combination of 22 notes. Remember, there are 4 beats in each measure.

= 1 beat

= 1 beat

= 1 beat

= 1 beat

2. An example of consecutive odd numbers is 23, 25, 27, and 29. Find four consecutive odd numbers with a sum of 64. Show your work.

3. Ms. Hine is having 21 people over for Thanksgiving. Each person wants to eat 3 turkey drumsticks. How many turkeys does Ms. Hine need to order? Explain your thinking.

4. Last weekend the Redskins vs. Steelers game had a final score of 12 to 27. In football, the scoring system is:

- > Touchdown = 6 points**
- > Extra Point Conversion = 1 point**
- > Two-Point Conversion = 2 points**
- > Field Goal = 3 points**
- > Safety= 2 points**

To get a conversion, teams must pair it with a touchdown.

Find three possible ways that the teams could have this final score. For example, the Redskins could score 2 touchdowns, and the Steelers could score 4 touchdowns and 1 field goal. You cannot use this as one of your combinations.

Problempalooza!

1. Only using addition, how can you add eight 8s to get the number 1,000?

2. I am an odd number less than 10; take away a letter and I become even. What number am I?

3. Some of 5th grade students line up in a row. Adam is number 17 counting from the front of the line and number 26 counting from the back of the line. How many 5th graders are in line?

4. Seventy two 5th graders ran in the 1 mile race. $\frac{1}{9}$ of them come in under 10 minutes. $\frac{1}{8}$ of them didn't finish. Two fifths of the rest came in between ten and twelve minutes. How many students came in with a time greater than twelve minutes?

Name _____

Problem-a-Palooza!

It's 6 am on April 14th. The minute hand goes all the way around the clock 40 times. What date and time will it be? Explain your thinking.

A bookstore has 41 ocean calendars and 48 space calendars in stock. Each day the store sells exactly 3 ocean and 4 space calendars. How many days will it take for the store have the same number of each calendar? How many of each calendar will the store have? Explain your thinking.

Find the area and perimeter of the figure. (Figure not drawn to scale.) Explain your thinking.



Problem-a-Palooza!

1. Keith divided 15 pennies among four small bags. He could then pay any sum of money from 1 cent to 15 cents without opening any bag. How many pennies did Keith put in each bag?
2. Hari, Michael, Niomi, and Will are arguing about who will be first, second, third, and fourth in line. How many different ways can they line up?

Extra Challenge: How many ways can Hari, Michael, Niomi, Will, and Sarah line up first, second, third, fourth, and fifth?

3. Add, subtract, multiply, and/or divide the numbers shown to get an answer of two. You may change the order, but you must use every number once and only once. Write an equation (number sentence) to show how you got your answer.

10 8 7 6 4

4. Mrs. Fox bought 6 boxes of markers and 4 boxes of pens. They cost her \$36. Ms. Hine bought 5 boxes of the same markers and 4 boxes of the same pens. Ms. Hine spent \$32. How much does each box of markers cost?
5. Ms. Hine went to Knott's Berry Farm over spring break. She went on 17 rides. If she spent an average of 25 minutes waiting in line for and riding each ride, and she spent 22 minutes buying and eating lunch, how long was she at Knott's Berry Farm?

Problem-a-Palooza!

May 16, 2013

1. In a restaurant there are 12 square tables. Only one person can sit on each side. What is the greatest number of people that can be seated if the tables are pushed end to end into one large rectangle? Explain your thinking.
2. At the end of the soccer tournament, each team captain shakes hands with every other team captain. If there were 8 teams in the tournament, how many handshakes were there? Explain your thinking.
3. A bag of marbles can be divided in equal shares among 2, 3, 4, 5, or 6 friends. What is the least number of marbles that the bag could contain? Explain your work.
4. Write and solve a decimal multiplication story. Explain your work.

5. Arrange the digits 4, 8, 7, 2, and 9 such that the answer will be the largest possible product. Explain your thinking!

$$\begin{array}{r} \square \square \square \\ \times \quad \square \square \\ \hline \end{array}$$

6. Riddle me this...and explain your thinking.

I am $> 5 \times 10$.

I am < 100 .

I am an even number.

I am not 70 or less.

I am a multiple of 4.

I am a multiple of 3.

I am < 80 .

7. George, Susan, Henry, and Sarah are 7, 8, 9, and 10 years old. Henry is older than Sarah and younger than George. Susan is younger than Henry and older than Sarah. What is each person's age? Explain your thinking.

George's age _____

Susan's age _____

Henry's age _____

Sarah's age _____