

Enatai Final Math Challenge 7

May 2009

These problems are labeled in order of increasing difficulty. Choose the one that you think fits your grade and math ability and solve the problem. People at home can help you. You will need to submit your answer using the R-E-C format that is explained on the attached form. Be certain to put the letter of the problem, your name and your teacher's name on the form when you submit it. All solutions are due to Mrs. Gaylord by Friday, May 29th. Bring your completed R-E-C form to the office. Students who successfully complete the challenge with the correct answer and a logical explanation of their mathematical thinking will receive a certificate and their name listed in the Principal Update. Happy Problem Solving!!!



Primary Problem A

A butterfly wasn't always a butterfly- it began as an egg. Use information about one butterfly to solve the following problem. A butterfly's egg stayed on a leaf for 3 days before hatching into a caterpillar. The caterpillar spent 5 days eating and weaving a cocoon. After 7 days in the cocoon, a butterfly emerged. How many days passed from the time the egg was laid until the butterfly could fly away?

Primary Problem B

Health experts recommend 60 minutes of physical activity each day for children and adults. If you follow this guideline, how many hours of exercise should you be getting in one week? How many in the month of May?



Primary Problem C



The Statue of Liberty is on Bedloe's Island in New York Harbor, so you must ride a ferry boat from New York City to visit the statue. The cost for each student to ride is \$3.00, and adults cost \$5.50. If you have 22 students, a teacher and two chaperones in your class, how much money would it cost for your class to ride the ferry?

Primary Problem D



In Washington State, the record high temperature was in Ice Harbor Dam, where it was 118°F on August 5, 1961. The record cold temperature was on December 30, 1968, when it was -48°F. What is the difference between these two temperatures?

Intermediate Problem E



The desks of a classroom are arranged in rows. Each row has the same number of desks. Tom sits in the second row from the front, which is the fourth row from the back. His seat is the third from the left side and the fifth from the right side. How many desks are in the room?

Intermediate Problem F

Half of my number is ten fewer than seven times the sum of the first eight prime numbers. What is my number?



Intermediate Problem G



The winner of a school election is announced after school at 4:00pm. One student calls 2 friends before 4:15pm, telling them the name of the winner. Before 4:30pm, those 2 people call 2 more students and tell them the name of the winner. Before 4:45pm, each new student who has been notified calls 2 more people, telling them the name of the winner. If no student is called twice, at what time will 200 students know the name of the winner?

Super-Duper Challenge Problem

A speaker comes to your school to make a 60 minute presentation in the auditorium. Of the students in the auditorium, 30% heard the entire speech and 10% slept through it; $\frac{1}{2}$ of the remaining students heard $\frac{1}{4}$ of the presentation, and the other $\frac{1}{2}$ heard $\frac{3}{4}$ of it. What is the average number of minutes of the presentation heard by the students in the audience?

