Missing Operations!
Write +, −, × or ÷ in each  to make the sentence true.

1. 20  9  4  2  = 5

2. 10  4  2  1  = 13

3. 7  3  5  10  = 5

4. 1  2  3  4  = 10

Dear Super Solvers,
The PRIME Center at Arizona State University invites all elementary school readers to take the PRIME MATHgazine Junior Challenge! Solve the puzzles and problems and send them in for a chance to become the

Great Stematician!
Each answer is worth 5 points. Points will be awarded for both creative ways to solve the problems, as well as for correct answers.

Send your answers by e-mail to primecenter@asu.edu or by mail to Editor, PRIME MATHgazine Junior, PO Box 875703, Tempe, AZ 85287-5703 or fax to 480-727-0910.

Way to Go!
Imagine you are in a car on highway 62, halfway between Trenton and Waterton. How far are you from:

1. Smithville? _____

2. Zero Center? _____

At an average speed of 55 mph, how long will it take you to make the trip from Smithville to Zero Center?

________________________________________________________________________

Highway 62

- Smithville 46 miles
- Trenton 84 miles
- Waterton 102 miles
- Zero Center 200 miles
Forming Numbers

Use the digits on this sign.
Make 4-digit numbers.
Use each digit once in each number.

How many different 4-digit numbers can you form that are:

1. Even numbers? _______
2. Odd numbers? _______
3. Greater than 5000? _______
4. Less than 3000? _______
5. Have an 8 in the tens place and a 2 in the hundreds place? _____

Hidden Shapes

How many rectangles are hidden in these shapes?
Remember: All squares are rectangles.

1. This figure has 3 rectangles: A, B, and AB together.
2. _______ rectangles
3. _______ rectangles

PRIME MATHgazine Junior
Chances Are?

The 10 marbles in the jar are red or black. If I pick a marble out of the jar without looking, the chance of getting a red marble is 1 out of 5.

How many black marbles are in the jar? There are ____ black marbles.

How many red marbles are in the jar? There are _____ red marbles.

X, Y, Z

X, Y, and Z are whole numbers.

X > Y
Y > Z
X + Y + Z = 30

1. What is the greatest number Y can be?

Y = _______

2. When Y is that number, what are X and Z?

X = _______
Z = _______
Drawing Dots

A has three more dots than B.

Altogether, there are 23 dots in the two rectangles.

How many dots in A? ____

How many dots in B? ____

Y has 4 less dots than Z.

Altogether there are 26 dots in the two rectangles.

How many dots in Y? ____

How many dots in Z? ____

F has one more than twice as many dots as G.

Altogether, there are 31 dots in the two rectangles.

How many dots in F? ____

How many dots in G? ____