• Math Instruction Evaluation •

Becoming a Mathnasium instructor means more than being proficient in math. It means being able to keep a watchful eye over your students, identify any needs or errors as they occur, and provide efficient instruction that stresses understanding as well as accuracy. This is at the heart of "the Mathnasium Method."

Though you may not be familiar with the Mathnasium Method yet, this test will give us a glimpse as to whether you have the ability to get into the mind of a student and teach at their level.

Below are some common examples of K – 8th grade math problems that your future student may encounter. Here, they have already been solved. Imagine that they have just been solved in front of you.

Your task will be to:

1) Determine if the given solution or statement is correct or incorrect.

2) If incorrect, explain in three sentences or less what you believe led the student to committing this error. What concepts does he/she not understand? What rules did they neglect or overapply?

3) Provide the correct solution. Show all of your work.

DATE _____

GRADE _____

NAME _____

EXAMPLE:

$$3^4 = 12$$

1) Incorrect

2) The student most likely misunderstood the problem to be "3 times 4." The student may not understand (or perhaps has forgotten) the concept of exponents. The student may have overapplied the rule that when two numbers are directly next to each other, as is the case in "3***x***" or "***xy***", the two numbers are multiplied.

3) $3^4 = (3)(3)(3)(3) = (9)(9) = 81$

1) $3 - 7 =$ 4

2) Insert the missing addend: $74 +$ 36 $= 100$

3) A store raises the price of a CD from \$16 to \$18. The percent of increase is: 2%

4) Solve for x: $3x - 5 = 18$

→ $\frac{3x - 5}{3} = \frac{18}{3}$

→ $x - 5 = 6$

$+5 \quad +5$

→ $x = 11$

5) $\frac{1}{2} + \frac{1}{3} = \frac{2}{5}$

