SABES Southeast
System for Adult Basic Education Support

at Bristol Community College
Decmber 2, 2009

TEACHING STRATEGIES TO BRIDGE THE GAP BETWEEN THE GED AND COLLEGE LEVEL MATHEMATICS

Workshop Questionnaire on Concepts:

Please answer the following questions about mathematics.

1. What is the meaning of $\sqrt{36}$?

2. What is the meaning of a^4 (in words)?

3. Write a word statement that describes the general relationship for the following word problem and that would help you create the equation(s) for the problem.

   A wedding photographer charges a base fee of $350 plus $40 per hour to cover a wedding. Write a function to be used to determine the final cost.

4. Write a word statement that describes the general relationship for the following word problem and that would help you create the equation(s) for the problem.

   Your back lawn measures 80 feet by 50 feet and you wish to build a square patio on it. If there are 3600 square feet of grass remaining in the yard once the patio is built, how long is each side of the patio?

5. Given the equation $x^2 - 3x - 4 = 0$, which of the following is correct?

   a) $x = 1$ b) $x = 0$ c) $x = 4$ d) $x = -1$

   How did you come up with the solution?

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6. Write an equation or equations to represent the following word problem. Do not solve.

Mike invests a total of $6000, some of it at 2% and the rest at 3%. If the total return on the investment is $155, how much was invested at each rate?

7. How would you determine the graph of the following relationships (one answer for all three)?

a) $y = 2x - 3$ b) $y = x^2 + 3x - 4$ c) $y = x^3 - 2x$

8. Write an equation to help solve the following problem.

Your current grades in this class are 73, 85, 71, and 96. What grade must you get on the next test in order to have an 80 average?

How else might you solve this problem?

9. How much is the square root of 18 (no calculator, please)?

10. Determine your answers to the following three problems and, if possible, write how you know your answer is correct.

a) $\frac{0}{0}$ b) $\frac{0}{5}$ c) $\frac{4}{0}$

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