

## Algebra Discipline Orange Belt Practice Test

Name \_\_\_\_\_

Use the 5-D process to solve the problems below. Show a minimum of 3 trials on each

1. George is 5 years older than his brother Mike. The sum of their ages is 51. What are their ages?

**Describe/Draw:**

	Define			Do	Decide
Trials					

**Declare:**

2. Repeat the 5-D process on your own to solve the following problem: A wood board 156 cm is cut into three parts. The two longer parts are the same length and each are 15 cm longer than the smaller part. How long are the three parts?

Algebra Discipline Orange Belt #2

3. Use the 5-D process to solve: Mr. Dave knew that a triangle had one side with a length of 16 inches and another side with a length of 20 inches. He did not know the length of the third side, but he did know that the perimeter was 5 times the length of the unknown side. What is the length of the unknown side?

4. Use the 5-D process to solve: The High Tech Middle basketball team did not record how many baskets each player made during the last game. Harle remembers that she made three times as many baskets as Grace. Alexis knows that she made six more baskets than Grace. Mikaela thinks she made 4 fewer baskets than Grace. Lily is sure that she made the same number of baskets as Mikaela. Altogether the five players made 47 baskets. How many baskets did each player make?