# • Analysis •

#### 1. Task: Look at this problem. What is the answer? 6 + 9 = \_\_\_\_

#### **Correct Answer:** 6 + 9 = 15

• Students working in Betα must understand addition and have a strong command of the addition facts with sums less than 20.

SKILL: Give the sum for a plus-nine addition fact without counting.

### **2.** Task: Look at this problem. What is the answer? 12 - 4 = \_\_\_\_\_ Correct Answer: 12 - 4 = 8

Students working in Betα must understand subtraction and have a strong command of the basic subtraction facts.

SKILL: Give the difference for a basic subtraction fact without counting.

# **3.** Task: Look at this number. Point to the digit that tells how many tens. **253** Correct Answer: 5

O This question assessed the student's understanding of place value. In this example (253), the 3 is in the units place, the 5 is in the tens place, and the 2 is in the hundreds place.

SKILL: Identify the value of a digit in the units, tens, or hundreds place.

#### 4. Task: Look at this number sentence. What number is missing? 5 + \_\_\_\_ = 8 Correct Answer: 5 + 3 = 8

The student could have used either subtraction (8 – 5 = 3) or counting up from 5 to 8 to find the missing number in the addition problem.

SKILL: Solve for the unknown addend in a simple addition equation.

5. Task: Write a number sentence to show how you would find the answer. John read a book for three minutes. He read for two more minutes.

How many minutes did John spend reading?

# **Possible Correct Answers:** 3 + 2 = \_\_\_\_, 2 + 3 = \_\_\_\_, 3 + 2 = 5, 2 + 3 = 5

• The student needed to be able to interpret a simple word problem and rewrite it as a number sentence in preparation for solving it. Solving the number sentence was optional for this question.

SKILL: Write a number sentence to represent a word problem.

#### 6. Task: Write the number forty-six.

#### **Correct Answer: 46**

The student should be able to write numbers accurately up to 99. Students at this level may occasionally write individual digits backward, but it is important that they do not write 46 as 64.

SKILL: Write a two-digit number accurately.

#### 7. Task: Write the number eight hundred thirty-five.

#### Correct Answer: 835

• The student should be able to write numbers accurately up to 999. Students at this level may occasionally write individual digits backward, but it is important that they do not write the digits in the wrong order.

SKILL: Write a three-digit number accurately.

#### 8. Task: Count aloud by tens to one hundred.

Correct Answer: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100

O Counting by tens demonstrates understanding of place value and patterns in numbers.

SKILL: Count by 10s to 100.

#### 9. Task: Start at 78 and count aloud to 100.

**Correct Answer:** 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100

Students should be able to count confidently to 100. If the student stumbled on one or two numbers, he may still be ready for Betα if he is able to tell what comes after a given number in the sequence.

SKILL: Count to 100.

# 10. A student who has mastered the prerequisite concepts should be able to complete the written assessment in about 20 minutes with little or no frustration.