Commentary Jupiter, VIII

1. (65) Students may use the *guess-check-revise* method. Some students might get the answer by putting the 36 and 94 on a number line, and deciding the point half-way between.

2.	6,4	or	4,6
	2,10	or	10, 2
	6,8	or	8, 6
	7,9	or	9, 7
	3, 15	or	15, 3
	30, 1	or	1, 30

Perhaps the easiest way to solve each of these problems is to focus on the numbers that would give the indicated product, and then see which of those pairs of numbers would give the indicated sum.

- 3. (10) Students may act out this problem, or they might draw a diagram with A, J, S, C, and T around a circle. They would then connect each letter with each other letter with a line, and count the lines.
- 4. (B) This is a two-step problem. Students will first have to find the sum of Karen's grades: 92 + 88 + 99 + 97 + 89 and get 465. Then they will divide 465 by 5 and come up with 93%, which is a B. Students can use a calculator for such situations.
- 5. 5 0, 6 8 2
 4 3, 8 9 6
 6, 7 8 6

 The problem involves deducing the two missing numbers, and one way is to work through the standard subtraction algorithm for the numbers.
- 6. (36°C) Students should realize that 12°C is too cold, and 120°F is too hot. Therefore by process of elimination, 36°C is the correct choice.
- 7. (\$1.16) This is a two-step problem. Students first have to decide how much Rachel spent. She bought 12 stamps at 32 cents each. 12 x \$0.32=\$3.84. Next, the students compute what her change would be. \$3.84 from \$5.00 = \$1.16.
- 8. 8 3 7 6
 8 3 7 6
 1 8 3 7 6
 3 5 1 2 8

 Students can start by looking for the T value. Three such numbers must sum to give an 8 in the ones place; 6 is a good choice. Then knowing 1 is "carried" to the next place, then can solve for N. Proceeding in this way solves the problem.
- 9. (a. 70; b. answers will vary.) Part (a) involves multiplying 10 and 7. For part (b), whatever number the student puts in the first blank, divide the number by 7 in a calculator to get the number in the second blank. The answers will most likely be 9 ÷ 7 = 1 2/7 ≈ 1.3 or 10÷ 7 = 1 3/7 ≈ 1.4 or 11 ÷ 7 = 1 4/7 ≈ 1.6. Be lenient in accepting reasonable answers for part (b), as some students will have the right idea but not know how to divide decimals or round their answers.