Commentary
Jupiter, IV

1. **(a. 70; b. 2520)** The student can multiply 14 times 5 for (a), and 14 times 180 for (b).

2. **(65° F)** Students can add 15 to 72, then subtract 22.

3. **(24)** Students may want to make a list and establish a pattern in order to solve this problem. They might name the pots shown as A, B, C, and D, and then see how many lists they can make, such as ABCD, ABCD, ACBD, ACDB, ADBC, ADCB. Those six are all the orders possible if A is on the left. There would be 6 such with B starting on the left, and 6 with C and 6 with D also, for a total of 24.

4. **(423)** *Guess-check-revise* is one way to solve the problem. A starting hint is that since the sum of the digits is nine, their average value is 3 so they are all small numbers.

5. **(Saturday)** Students might use calendar, or list S, M, T, W, T, F, S, and start counting with 7 on Tuesday, and count to 25.

6. **(a. 3 million; b. 36 million; c. 2 1/2 billion)** The problem situation calls for estimated answers rather than exact numbers, which would be misleading in such a problem. Students should be allowed leeway in their estimates, as they can vary quite a bit. Hopefully students will use a calculator to find (a), and continue to use it in finding (b) and (c) by entering only the non-zero digits to fit into the 8-digit calculator.

7. **(a. 10; b. 9; c. 9)** Students may use cubes or blocks to construct models. Students with good spatial visualization can find the answers from the pictures.

8. **(car and donkeys)** Students can approach this in a number of ways. Since the car matches 3 elephants from the second picture, they can be "removed" from the last tug of war without affecting the situation. Thus we are left asking which would win, 1 elephant matched against 3 donkeys. From the first picture, we see that an elephant pulls as much as 2 1/2 donkeys, so 3 donkeys would put pull one elephant. Therefore a car and 3 donkeys would out pull 4 elephants.