Commentary

Earth, XI

1. **(about 30)** Subtracting "forty something" from "70 something" might give about 30. It couldn't give a number close to 50, as 79 – 40 would give the highest difference, 39. Likewise, "about 110" is unreasonable, although some students might get it because they add instead of subtract.

2. **(Yes)** The cost of the two items is 79¢. Maria has 95¢. She has enough money to buy both. Students might want to count her money using real coins, or use a calculator.

3. **($1.75)** Students need to know that a week has seven days. Some students might know the answer is 7 quarters, but not know how to convert that amount into dollars and cents. Give them 1 star for such an answer.

4. **(800)** Students should use their intuition that 288 is close to 300, and 497 is close to 500, and 300 plus 500 is 800.

5. **(65, 67, 69, 71, 73, 75, 77)** Students should see the pattern of counting by 2.

6. **(1)** Students should draw 6 rocks in the right hand, giving a total of nine. This is one less than 10 fingers.

7. **(a. Lee; b. Sept. 21; c. John; d. 5)** Students who are familiar with a calendar should have no difficulty with this problem.

8. **(12)** Students may solve this by *working backwards* or by *guess-check-revise*. To work backwards, they start at the end number, 10, and ask themselves what the previous number would have to be so that, when 5 is subtracted, 10 is left. They would get 15 as the next-to-last number. Then they would work backward again by asking what number, when 3 is added, gives 15. That number is 12, which is the starting number. To guess-check-revise, students would simply guess a start number and do the arithmetic. If that wasn't correct, they would guess a different start number, either higher or lower than the first, based on what happened with the first.