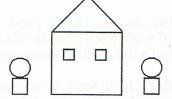
Commentary

Venus, IX

1. (43¢) The ears, nose, and teeth are 9 triangles, which costs 27ϕ . The two eyes are squares and cost 10ϕ . The face is a circle and costs 6ϕ .

Students might practice this problem with a different shape, such as the house and two bushes to the right.



- 2. (20 or 21 cm) Students will solve this in different ways. Some will count by ones from 4 (or perhaps 4 1/2), up to 25. Some might count by ones, but start at 25 and work down to the other end, 4. Others will mark the length of the tape dispenser on a piece of paper or another object, and hold that distance up to zero on the scale and read the other end. Others will count backwards (25, 24, 23, ...) down to 4, but then they won't know the answer unless they know how many times they counted. A few might subtract 4 from 25.
- 3. (9, 11) Students might practice making patterns like these out of tiles, cubes, or other manipulatives. A prompt might be to ask students having difficulty with such problems -- how do you get from step 1 to step 2? How do you get from step 2 to step 3? This will encourage them to relate each figure to the one which immediately follows or precedes it. Students who are unfamiliar with patterns might have trouble focusing on the parts of the pattern, and be looking globally at the design.
- 4. (19) Students might *guess-check-revise* for this problem. That is, they might try a number like 10 to start, and see if they get 13 after subtracting 6. They then revise their guess of 10 accordingly.
- 5. (3) To balance the scale, the student has to draw three apples on the right side of the scale. A key to solving such problems is some familiarity with balance scales in the classroom, knowing that the same weight must be on both pans for the bar to be horizontal. This model is important for later work with Superstars as a balanced scale is a physical embodiment of the way the equals sign is used in mathematics.
- 6. (4) Students will approach this problem in different ways. Some will count out individual pieces one at a time for the 4 kids, till all are gone. Others will divide each pizza into four equal parts, so each kid will get 2 pieces from each pizza for a total of four. Still others might think initially that 2 kids can share both pizzas, and cut each pizza in half and thus give 4 adjoining pieces to each kid.
- 7. (48, 46, 45, 86, 85, 84, 65, 68, 64, 56, 58, 54) Students might practice this problem with only 3 cards first, and different numbers than the four given.