Commentary

Jupiter, XX

1. **(112)** Students may make a chart according to the animal's number of legs. Dogs, cats, turtles, lizards and the pig have 4 legs each, so the total of 4-legged creatures is 4 x (5 + 4 + 2 + 2 + 1) or 4 x 14 = 56. The 12 birds contribute 24 legs and the 4 spiders have 8 legs each or 32 all together. Therefore there are 56 + 24 + 32 = 112 legs.

2. **(55 pounds, 8 oz)** Students need to convert 1 pound to 16 ounces in order to be able to subtract. The 68 pounds become 67 pounds, 16 ounces, and 12 pounds, 8 ounces is then subtracted.

3. **($6.25)** Students might multiply 12.5 x $0.50, or they might realize that every 2 pounds will cost $1, so 12 pounds will cost $6. They then realize that 1/2 pound will cost half of 50¢, or 25¢, and combine that with $6.

4. **(pages 88, 89)** Students may need to be reminded that pages in a book are consecutive. If they divide 177 by 2, they will get a hint that the answer must be 88 and 89.

5. **(4)** Drawing 1/2 dozen eggs, or 6 eggs, will lead to a solution. Then 1/3 of them, or 2 eggs, can be crossed out, leaving 4 eggs.

6. **(E and F should be circled.)** These two points are the only two with an odd number of paths going in and coming out. Consequently, these are the only two places where you can begin such a network, and trace it without backtracking.

7. **(15)** Students can make a chart or diagram to solve this problem, or a list such as the one below which uses A, B, C, D, E, and F to represent the six classrooms:

   AB, AC, AD, AE, AF, BC, BD, BE, BF, CD, CE, CF, DE, DF, EF

8. **(a. 57; b. 8; c. 29)** For part (a) students add 7, 13, 29, and 8. For (b), they look for the number common to both pizza and hot dogs, but is not common to tacos. For (c), the students locate the number common to all three rectangles.