

## Commentary

*Jupiter, XXII*

1. **(Tuesday)** Students can use a calendar or make a chart with “Su, M, T, W, Th, F, Sa” at the top, and begin numbering backward with 24 under Saturday.
2. **(8)** Students can solve this problem by drawing a diagram or by visualizing 24 colas.  $1/2$  of 24 is 12, and  $1/3$  of 12 is 4. Therefore Chris gave away 4 sodas of the 12, leaving 8.
3. **(65)** Students will probably solve this by first finding the total weight of the 12 girls:  $12 \times 55 = 660$  pounds. Then they will compute  $1050 - 660 = 390$  pounds, the weight of the 6 boys. Computing  $390 \div 6 = 65$  pounds per boy.
4. **(91, 92, 93)** Students may use the *guess-check-revise* method. Some students might know that the numbers they seek are about  $1/3$  of the total, and approximate the numbers by dividing 276 by 3. This gives 92, which is the middle number.
5. **(48)** Students may want to draw a picture to help solve this problem. Spiders have 8 legs, which would be 4 pairs of shoes per spider.
6. **(29 hours and 45 minutes)** Most students will realize that from 8:45 AM to 8:45 AM the next day, is 24 hours. They will then “add on” 5 additional hours to get to 9:45, 10:45, 11:45, 12:45, and 1:45, and then 45 minutes to get to 2:30 PM.
7. **(27)** There would be 12 wheels on the 3 cars, 8 on the 4 bicycles, 6 on the 2 tricycles, and 1 on the unicycle.
8. **(\$1.84)** Students will probably add \$6.98 and \$9.99 to get \$16.97, then add the tax of \$1.19 to get \$18.16. They will subtract this amount from \$20.
9. **(a. C; b. D; c. G)** Hopefully students will notice that the multiples of 7 are in column A, and use this fact to get “close to” the numbers 100, 500, and 1,000. Ninety-eight ( $14 \times 7$ ) is the closest multiple of 7 less than 100, so 98 would be in column A, forcing 100 to be in column C. Likewise, 497 or  $71 \times 7$  is in column A, giving that 500 is in column D. Finally, 994 or  $142 \times 7$  is in A, indicating that 1000 is in column G.