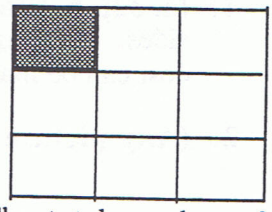
Commentary

Jupiter, XVI

1. **(Any model with one shaded cell is correct.)** Students will likely think of dividing the rectangle into thirds either horizontally or vertically, and then one of those thirds into thirds going in the other direction.

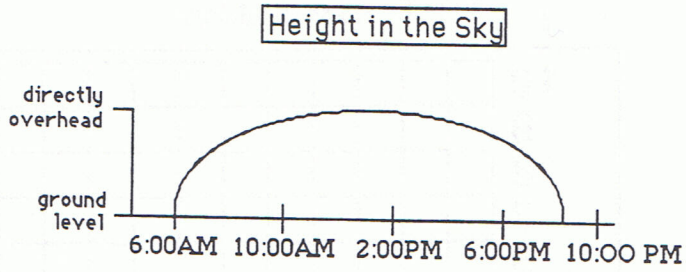


2. **(a. 71, 68, 69, 70, 67; b. Cincinnati; c. St. Louis; d. 69)** The total number of games comes from adding each teams wins and losses. Students can find the winning percentages by dividing the wins for each team by the losses. When rounded off to two decimal places, these percentages are: 0.43, 0.63; 0.55, 0.53, and 0.45 for the teams as listed, top to bottom, in the chart. The highest of these percentages is 0.63 and the lowest is 0.44, corresponding to Cincinnati and St. Louis, respectively. The average number of games played is (68 + 69 + 70 + 67 + 71) ÷ 5, or 69.

3. **(7)** There are 3 large squares, and 4 smaller ones in the center.

4. **($69.72)** The students first need to find how each item will cost on sale. They will probably divide the price of the dress by 2 to get the new price, $47.25. They will probably divide the price of the shoes by 4 to get $7.49, and subtract that from the regular price to get the sale price, $22.47. They then add these two sale prices. This is only one way a fourth grader might approach this problem.

5. **(See the graph below.)**



6. **(a. 10 out of 54, or 5 out of 27, which can also be written as a ratio, fraction, decimal or percent -- 10:54 or 10/54 or 0.19 or 19%; b. 13 out of 54, which can also be written as a ratio, fraction, decimal or percent -- 13:54 or 13/54 or 0.24 or 24%)** There are 10 brown M&M's out of 54 in the bag, which is a 10/54 chance of getting a brown one. There are 13 red or blue M&M's and no whites, so the chances of getting a color in the American flag is 13/54.

7. **($3)** Four packages of pencils cost about $4, two packages of paper cost about $2.00, and the eraser package costs about $1. This totals $7, so he would have $3 left out of $10.