

Daily Dilemma #14: Answer Key

1. #1 shows the cake divided into an equal number of pieces. Each girl will get 4 pieces of cake.

2. $\$30.00 / \text{day} \cdot 7 \text{ days} = \210.00
 $\$.22 / \text{km} \cdot 230 \text{ km} = \50.60 mileage
total cost = $210.00 + 50.60 = \$260.60$

3. Profit = $38.10 - (12.00 + 6.33 + 2.46 + 4.50) = 12.81$

Each boy gets $\$12.81 \div 3 = \4.27

4.

Time	8:00	8:01	8:02	8:03	8:04	8:05
No. of boys	1	5	9	13	17	21

Time	8:06	8:07	8:08	8:09	8:10
No. of boys	25	29	33	37	41

41 boy scouts left for the fair at 8:10.

Extra Credit Rule: number of boys = $4 (\text{number of minutes after } 8) + 1$

5.

↳ after it flipped
↳ 90° counterclockwise

Extra Credit area = $13 \cdot 15 = 195$ square feet of carpet

The border material requires the perimeter:
 $13 + 15 + 13 + 15 = 56$ feet

*The magic numbers are the sum of the correct answers.