

Daily Dilemma #10: Answer Key

1. Work backwards



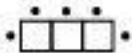
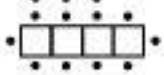
She used $\frac{1}{4}$ of the total amount of soap to clean the clothes because she used half of the remaining half.

So, the 15 bars of soap left is $\frac{3}{4}$ of the total amount of soap.

If n is the total number of bars of soap, $15 = \frac{3}{4} \cdot n \rightarrow n = 20$ bars of soap

2. 15 girls were at a party along with 15 mothers.

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1 table		seats 4 people
2 tables		seat 6 people
3 tables		seat 8 people
4 tables		seat 10 people
n tables		seat $2n + 2$ people

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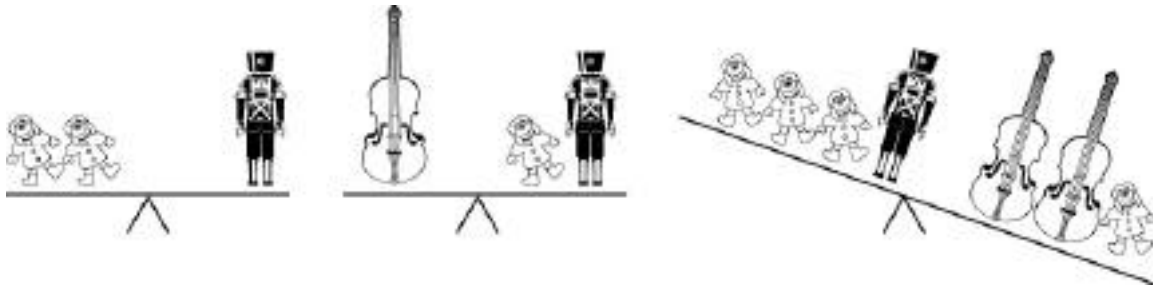
3. $26 - 2 - 9 = 15$ hours of praying from Mon. – Friday
Then $15 \div 5 = 3$ hours of praying each day.

- 4.

Number of candles	3	4	5	6
Number of strawberries	3	4	5	6

There would be 14 candles so Peter would be 14 years old. Draw a picture.

- 5.



From the first scale, a soldier is 2 if a doll is 1. Then a violin is the sum of a soldier and a doll, or $2 + 1 = 3$.

On the third scale, the left side has a value of 5; the right side has a value of 7. So, the scale is balanced by putting another soldier on the left side.