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- 51.** What is wrong with the following calculations that show there are only 30 days in a school year?

$$\begin{array}{r}
 365 \text{ days in a year} \\
 - 90 \text{ (3 month vacation)} \\
 \hline
 275 \\
 - 19 \text{ (school vacation days)} \\
 \hline
 256 \\
 - 122 \text{ (days sleeping—approximately 8 hours per day)} \\
 \hline
 134 \\
 - 104 \text{ (weekend days)} \\
 \hline
 30 \text{ (days left in school)}
 \end{array}$$

Explain how you got your answer.

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- 52.** Suppose you roll a total of 6 with normal playing dice, one of which is red and one of which is blue. What is the probability that you will roll a total of 6 again before you roll a total of 7? If you roll anything other than a 6 or 7 in this situation, roll again. Remember that you are looking for the probability of a 7 after a 6.