Tasty Division

ACTIVITY

Hazel is allowed to buy one bag of sweets every week with some of her pocket money. She tries to make the sweets last several days.

1. One week, the bag she bought had 24 sweets in it. She ate $\frac{1}{4}$ of them one day, $\frac{1}{3}$ of what was left the next day, and $\frac{1}{2}$ of what was left the following day.

   How many sweets did she eat each day, and how many did she have left after that?

2. The next week, she started with 30. She ate $\frac{1}{5}$ on the first day, $\frac{1}{3}$ of what was left on the second day, $\frac{1}{4}$ of what was left on the third day, and $\frac{1}{3}$ of what was left on the fourth day. On the fifth day, she ate $\frac{1}{2}$ of what was left and finished the rest the following day.

   How many did she eat each day?

3. The following week, Hazel's friend Lucy visited her on Monday, the day she bought her bag of sweets. That day, they ate $\frac{1}{2}$ the bag of sweets. On Tuesday, Hazel ate $\frac{2}{3}$ of what was left, and on Wednesday, she also ate $\frac{2}{3}$ of what was left. She had two sweets left for Thursday.

   How many sweets did she have in her bag to begin with?

4. The week after that, Hazel ate $\frac{1}{4}$ of her sweets on Monday, $\frac{1}{5}$ of what was left on Tuesday, $\frac{1}{4}$ of what was left on Wednesday, and $\frac{1}{2}$ of what was left on Thursday. She ate $\frac{1}{3}$ of what was left on Friday and had six sweets left for Saturday.

   How many sweets did she have in her bag to begin with?

5. Make up a sweet-eating problem involving Hazel eating a fraction of her sweets each day. You must have at least 5 days and use at least $\frac{1}{4}$, $\frac{1}{3}$, and $\frac{1}{2}$ in your problem. Work out the solutions and then get a classmate to solve your problem.