## Fractions - mixed operations word problems

1. In 2 days of working, Jacob earned $\$ 15$ on Monday from selling recyclable bottles and $\$ 27$ from recyclable cans on Tuesday. He put $\frac{5}{6}$ of his earnings in his piggy bank and used the rest to buy a shirt. How much money did he save?
2. Nathan went to the mall to buy a pair of jeans. The price of a pair of jeans was $\$ 60$. They were on sale, so the price was less one-tenth of the original price. Every loyalty card holder gets an additional discount, which is $\frac{1}{5}$ off the original price. How much did he pay for the pair of jeans if he has a loyalty card?
3. There were 80 oranges in the basket. Marcus ate 5 of them. Owen shared one-third of the oranges left in the basket with his friends. How many oranges were left in the basket after James took 5?

4. A box of pizza was left out on the table by Levi's brother. $\frac{1}{8}$ of the pizza had already been eaten by his brother. Levi ate $\frac{2}{5}$ of the pizza on the table and drank 2 glasses of soda. How much of the whole pizza did Levi eat?
5. To bake a loaf bread requires $\frac{2}{5}$ kilograms of flour and $\frac{4}{9}$ of a box of butter. How many loaves of bread can a baker make if he has 40 kilograms of flour?
6. There are 6 boxes, each containing 12 candy bars. How many candy bars are there altogether? If $\frac{2}{3}$ of the candy bars are chocolate, how many chocolate bars are there?

## Answers

1. $\$ 15+\$ 27=\$ 42-$ Total earnings from the recyclable materials
$42 \times \frac{5}{6}=35$
Jacob saved $\$ 35$ from his earnings and put them in his piggy bank.
2. $\frac{1}{10}+\frac{1}{5}=\frac{3}{10}$ discount
$60 \times \frac{3}{10}=18$, the total discount is $\$ 18$.
$60-18=42$
Nathan paid $\$ 42$ for the pair of jeans.
3. $80-5=75$ oranges after Marcus ate 5
$75 \times \frac{1}{3}=25$ oranges were shared by Owen with his friends
$75-25=50$ oranges after Owen shared $\frac{1}{3}$ of what was left in the basket
$50-5=45$
45 oranges were left in the basket.
4. $\frac{8}{8}$ ( 1 whole) $-\frac{1}{8}=\frac{7}{8}$ of the pizza was left initially
$\frac{7}{8} x \frac{2}{5}=\frac{14}{40}$ which reduces to $\frac{7}{20}$
$\frac{7}{20}$ of the pizza was eaten by Levi.
5. $40 \div \frac{2}{5}=100$

A baker can make 100 loaves of bread with 40 kilograms of flour.
6. $6 \times 12=72$ candy bars
$72 \times \frac{2}{3}=48$
There are 48 chocolate bars.

