# Problem Solving: Draw a Picture 

Veronica is celebrating her birthday by having a skating party. As part of a birthday special, Veronica paid for 10 tickets and 2 guests received free admission. What fraction of the people at Veronica's party were not charged for admission?

## Read and Understand

What do you know? There were 10 paid admissions and 2 free admissions.
What are you trying to find? The fraction of people attending Veronica's party that were admitted at no charge.

## Plan and Solve

What strategy will you use? Draw a picture to show the 10 paid admissions and the 2 free admissions.
Count the boxes. There were 12 people admitted. Since 2 of the 12 people were admitted at no charge, the fraction is $\frac{2}{12}$, or $\frac{1}{6}$ in simplest form.

| Paid admission |  |  |  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

## Look Back and Check

Is your answer reasonable? Yes. The picture shows 2 out of 12 boxes, which is $\frac{2}{12}$, or $\frac{1}{6}$.

Draw or use a picture to solve each problem.
One afternoon, the ratio of black shirts sold to white shirts sold at The Clothes Horse was 2:1. Complete the picture to show the ratio.

| Black shirts sold |  |  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| White shirts sold |  |  |  |  |  |  |  |  |  |

1. How many boxes are shaded in all?
2. What fraction of the shirts sold were black?
3. The Clothes Horse sold 12 shirts that afternoon. How many black shirts were sold? HINT: You can add to the picture until there are 12 shaded boxes to represent the problem.
4. Ilene earns $\$ 20$. She saves $\$ 2$ for every $\$ 8$ that she spends.

How much of the $\$ 20$ will she save?

