

Johann sold 9 of his video games online. The next day, he sold 27 video games. He collected a total of \$900. If Johann charged the same amount for each video game, how much did he sell each game for?

$$9x + 27x = 900$$

Write an equation.

$$36x = 900$$

Combine like terms.

$$\frac{36x}{36} = \frac{900}{36}$$

Divide each side by 36.

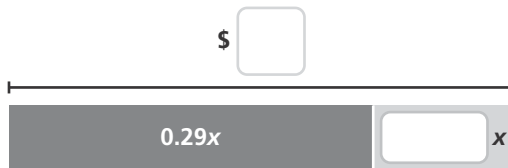
$$x = 25$$

Simplify.

Johann sold each game for \$25.

Joshua makes earrings to sell at craft fairs. Each pair of earring contains the same number of wooden beads as glass beads. For each pair, Joshua spends a total of \$0.29 on the wooden beads and \$0.11 on the glass beads. How many pairs of earrings, x , can Joshua make if he has \$20 to spend on beads?

- Use the information in the problem to complete the bar diagram.



- Write an equation to represent the bar diagram.
- What are the like terms in your equation from Exercise 2? Rewrite the equation by combining the like terms.
- Divide each side of the equation by the same number to solve for x . How many pairs of earrings can Joshua make?

On the Back!

- Irene owns a bakery. For each cake, she spends $\frac{1}{4}$ of an hour to make frosting and $\frac{2}{5}$ hour to decorate. How many cakes can Irene frost and decorate in $3\frac{1}{4}$ hours?