$$
-\frac{3}{4} x=21
$$

$$
\frac{2}{5} x-10=20
$$

$$
-32+\frac{2}{3} x=2 \frac{1}{3} x+3
$$

## $8 x-(-7+5 x)=11+x$

$$
15-\frac{7}{12} x=\frac{3}{4} x-1
$$

## WRITE AN EQUATION

Five times the sum of a third of a number plus 20 equals 400 .

## PERIMETER

Millie is planning to use exactly 112 feet of fencing as the border of a rectangular garden. If the width of the garden is 13 of the length of the garden, what is the width of the garden?

Hint: let $L$ be the length of the garden. Draw a picture.

## EQUAL COST

A house painting company charges $\$ 376$ plus $\$ 12$ per hour. Another painting company charges $\$ 280$ plus $\$ 15$ per hour.
a. How long is a job for which both companies will charge the same amount?
b. What will that cost be?

## AGE PROBLEM

Mary is 16 years older than Dana and Dana is 13 years younger than Chris. if the sum of their ages is 62 , find each person's age.

## CONSECUTIVE NUMBER PROBLEM

Find three consecutive numbers whose sum is 543 .

## ANOTHER WORD PROBLEM

You and your friend both bought some gum. Your friend spent three times as much as you did. Altogether, you spent $\$ 4.80$. How much did you each spend on gum?

## AGE PROBLEM

In 16 years, Lilly will be 5 times as old as she is now. How old is Lilly now?

## CONSECUTIVE NUMBERS

The sum of two consecutive numbers is 87. What are the numbers?

Mr. Young's class did a food drive. Brad brought some cans. Brittany brought twice as many cans as Brad. Belinda brought 7 more cans than Brad. They brought 27 cans total. Set up an equation and solve it to find out how many cans Brad brought.

If the perimeter of the triangle is 38 , find the value of $x$.


If the area of the rectangle is 44 , find the value of $x$ :


$$
2 x-3
$$

## Cool Down

$$
5(x-20)=\frac{1}{2}(4 x+4)
$$

