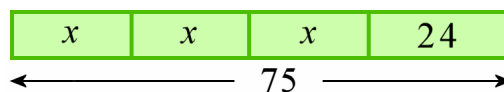


# More Equations

Think of this bar model as being a board of a certain length. We can write an equation about it. Notice, its TOTAL length is 75. All those “blocks” added together equal 75:



$$x + x + x + 24 = 75$$

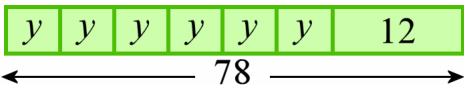
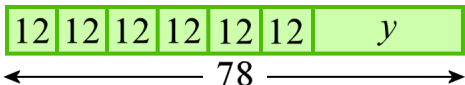
Then,  $x + x + x$  is the same as  $3x$  or 3 times  $x$ . We omit the multiplication sign between a number and a letter. So, the equation can also be written as

$$3x + 24 = 75.$$

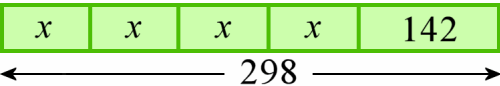
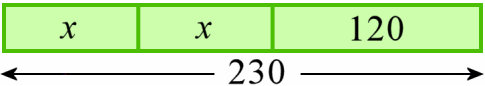
How can you solve it?

Take away the block with 24. Then, the total for the 3  $x$ 's must be 51 (because  $75 - 24 = 51$ ). Then you just have to find a number so that 3 times the number is 51. Guess and check!

1. Match one equation with each bar model. Then, solve for  $y$ .

<p><u>Equations:</u></p> <p><math>6y + 12 = 78</math></p> <p><math>6 \times 12 + y = 78</math></p>	<p>a. </p>	<p>b. </p>
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2. Write an equation for each bar model. Then, solve for  $x$ .

<p>a. </p>	<p>b. </p>
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