

Equivalent Equations

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Consider the equation:

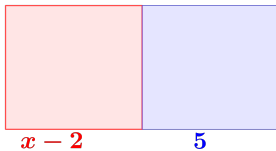
$$x - 2 = 5$$

Equivalent Equations

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We can visualize these as two stacks, each of height 5.



Equivalent Equations

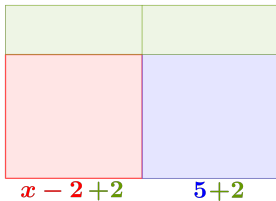
Consider the equation:

$$x - 2 = 5$$

$$x - 2 + 2 = 5 + 2$$

Now, to solve for x we would want to **Add 2** to both sides.

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Equivalent Equations

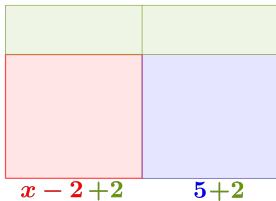
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Now, to solve for x we would want to **Add 2** to both sides. Notice that both sides (and stacks) increased to 7.

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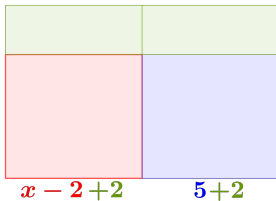
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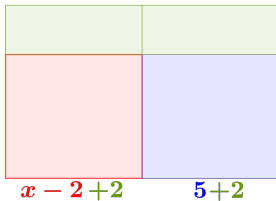
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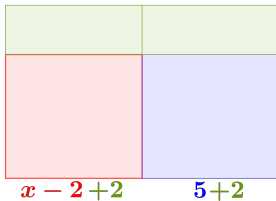
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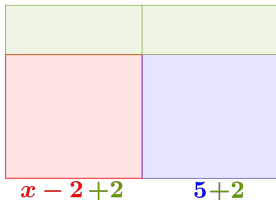
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Definition: Two equations are *equivalent* if they have the same solution(s).