## Algebra I Lesson \#4 Unit 2 Class Worksheet \#4 For Worksheets 8 \& 9

Algebra I Solving Equations The SID Method

1. $\mathbf{5 x}+\mathbf{3 x}+\mathbf{1}=\mathbf{1 7}$

Algebra I Solving Equations The SID Method

$$
\text { 1. } \mathbf{5 x}+\mathbf{3 x}+\mathbf{1}=\mathbf{1 7}
$$

## The SID Method

Algebra I Solving Equations The SID Method

$$
\text { 1. } \mathbf{5 x}+\mathbf{3 x}+\mathbf{1}=\mathbf{1 7}
$$

## The SID Method

S stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method

$$
\text { 1. } \quad \mathbf{5 x}+\mathbf{3 x}+\mathbf{1}=\mathbf{1 7}
$$

## The SID Method

S stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method

$$
\text { 1. } \quad \mathbf{5 x}+\mathbf{3 x}+\mathbf{1}=\mathbf{1 7}
$$

$$
\mathbf{8 x}
$$

## The SID Method

S stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method

$$
\begin{gathered}
\text { 1. } \quad \mathbf{5 x}+\mathbf{3 x}+\mathbf{1}=\mathbf{1 7} \\
\mathbf{8 x}+\mathbf{1}
\end{gathered}
$$

## The SID Method

S stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method

$$
\begin{aligned}
& \text { 1. } \mathbf{5 x}+\mathbf{3 x}+\mathbf{1}=\mathbf{1 7} \\
& 8 \mathrm{x}+1=
\end{aligned}
$$

## The SID Method

S stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method

$$
\text { 1. } \quad \begin{gathered}
\mathbf{5 x}+\mathbf{3 x}+\mathbf{1}=\mathbf{1 7} \\
\mathbf{8 x}+\mathbf{1}=\mathbf{1 7}
\end{gathered}
$$

## The SID Method

$\mathbf{S}$ stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method

$$
\text { 1. } \quad \begin{array}{r}
\mathbf{5 x}+\mathbf{3 x}+\mathbf{1}=\mathbf{1 7} \\
\mathbf{8 x}+\mathbf{1}=\mathbf{1 7}
\end{array}
$$

## The SID Method

S stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method

$$
\text { 1. } \quad \begin{gathered}
\mathbf{5 x}+\mathbf{3 x}+\mathbf{1}=\mathbf{1 7} \\
\mathbf{8 x}+\mathbf{1}=\mathbf{1 7}
\end{gathered}
$$

## The SID Method

S stands for Simplify the expression on each side.
I stands for ISOlate the variable.

Algebra I Solving Equations The SID Method

$$
\begin{array}{cc}
\text { 1. } \quad \mathbf{5 x}+\mathbf{3 x}+\mathbf{1}=17 \\
\mathbf{8 x}+\mathbf{1}=\mathbf{1 7} & \text { Subtract } \mathbf{1} \\
& \text { from } \\
\text { each side. }
\end{array}
$$

## The SID Method

S stands for Simplify the expression on each side.
I stands for ISolate the variable.

Algebra I Solving Equations The SID Method

$$
\begin{array}{cc}
\text { 1. } \quad \mathbf{5 x}+\mathbf{3 x}+\mathbf{1}=\mathbf{1 7} & \text { Subtract } \mathbf{1} \\
\mathbf{8 x}+\mathbf{1}=\mathbf{1 7} & \text { from } \\
\mathbf{8 x}= & \text { each side. }
\end{array}
$$

## The SID Method

S stands for Simplify the expression on each side.
I stands for ISolate the variable.

Algebra I Solving Equations The SID Method

$$
\begin{array}{cc}
\text { 1. } \quad \mathbf{5 x}+\mathbf{3 x}+\mathbf{1}=\mathbf{1 7} & \text { Subtract } \mathbf{1} \\
\mathbf{8 x}+\mathbf{1}=\mathbf{1 7} & \text { from } \\
\mathbf{8 x}=\mathbf{1 6} & \text { each side. }
\end{array}
$$

## The SID Method

S stands for Simplify the expression on each side.
I stands for ISolate the variable.

Algebra I Solving Equations The SID Method

$$
\text { 1. } \quad \mathbf{5 x}+\mathbf{3 x}+\mathbf{1}=\mathbf{1 7} 9 \text { } \begin{gathered}
\mathbf{8 x}+\mathbf{1}=\mathbf{1 7} \\
\mathbf{8 x}=\mathbf{1 6}
\end{gathered}
$$

## The SID Method

S stands for Simplify the expression on each side.
I stands for ISolate the variable.

Algebra I Solving Equations The SID Method

$$
\begin{aligned}
& \text { 1. } \mathbf{5 x}+\mathbf{3 x}+\mathbf{1}=\mathbf{1 7} \\
& 8 x+1=17 \\
& 8 \mathrm{x}=16
\end{aligned}
$$

## The SID Method

S stands for Simplify the expression on each side.
I stands for ISolate the variable.
D stands for Divide both sides by the coefficient of x .

Algebra I Solving Equations The SID Method

$$
\begin{aligned}
& \text { 1. } \mathbf{5 x}+\mathbf{3 x}+\mathbf{1}=\mathbf{1 7} \\
& 8 x+1=17 \\
& 8 \mathrm{x}=16
\end{aligned}
$$

> Divide both sides
> by 8

## The SID Method

S stands for Simplify the expression on each side.
I stands for ISolate the variable.
D stands for Divide both sides by the coefficient of $\mathbf{x}$.

Algebra I Solving Equations The SID Method

$$
\begin{aligned}
& \text { 1. } \mathbf{5 x}+\mathbf{3 x}+\mathbf{1}=\mathbf{1 7} \\
& 8 x+1=17 \\
& 8 \mathrm{x}=16 \\
& \mathrm{x}=
\end{aligned}
$$

## Divide both sides <br> by 8

## The SID Method

S stands for Simplify the expression on each side.
I stands for ISolate the variable.
D stands for Divide both sides by the coefficient of x .

Algebra I Solving Equations The SID Method

$$
\begin{aligned}
& \text { 1. } \mathbf{5 x}+\mathbf{3 x}+\mathbf{1}=\mathbf{1 7} \\
& 8 x+1=17 \\
& 8 \mathrm{x}=16 \\
& x=2
\end{aligned}
$$

## Divide both sides <br> by 8

## The SID Method

S stands for Simplify the expression on each side.
I stands for ISolate the variable.
D stands for Divide both sides by the coefficient of x .

Algebra I Solving Equations The SID Method

$$
\begin{aligned}
& \text { 1. } \mathbf{5 x}+\mathbf{3 x}+\mathbf{1}=\mathbf{1 7} \\
& 8 x+1=17 \\
& 8 \mathrm{x}=16 \\
& x=2
\end{aligned}
$$

## The SID Method

$\mathbf{S}$ stands for Simplify the expression on each side.
I stands for ISolate the variable.
D stands for Divide both sides by the coefficient of x .

Algebra I Solving Equations The SID Method

$$
\text { 2. } \quad \mathbf{9 x}-\mathbf{3 x}+\mathbf{3}=\mathbf{2 7}
$$

## The SID Method

Algebra I Solving Equations The SID Method
2. $\mathbf{9 x}-\mathbf{3 x}+\mathbf{3}=\mathbf{2 7}$

## The SID Method

S stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method
2. $\mathbf{9 x}-\mathbf{3 x}+\mathbf{3}=\mathbf{2 7}$

## The SID Method

S stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method
2. $\mathbf{9 x}-\mathbf{3 x}+\mathbf{3}=\mathbf{2 7}$
$6 x$

## The SID Method

S stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method

$$
\text { 2. } \quad \begin{aligned}
& \mathbf{9 x}-\mathbf{3 x}+\mathbf{3}=\mathbf{2 7} \\
& 6 x+3=
\end{aligned}
$$

## The SID Method

S stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method

$$
\text { 2. } \begin{aligned}
\mathbf{9 x}-\mathbf{3 x}+\mathbf{3}=\mathbf{2 7} \\
\mathbf{6 x}+\mathbf{3}=\mathbf{2 7}
\end{aligned}
$$

## The SID Method

S stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method

$$
\text { 2. } \begin{aligned}
\mathbf{9 x}-\mathbf{3 x}+\mathbf{3}=\mathbf{2 7} \\
\mathbf{6 x}+\mathbf{3}=\mathbf{2 7}
\end{aligned}
$$

## The SID Method

S stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method

$$
\text { 2. } \begin{aligned}
\mathbf{9 x}-\mathbf{3 x}+\mathbf{3}=\mathbf{2 7} \\
\mathbf{6 x}+\mathbf{3}=\mathbf{2 7}
\end{aligned}
$$

## The SID Method

S stands for Simplify the expression on each side.
I stands for ISOlate the variable.

Algebra I Solving Equations The SID Method

$$
\text { 2. } \begin{array}{cc}
9 x-3 x+3=27 & \text { Subtract } 3 \\
6 x+3=27 & \text { from } \\
& \text { each side. }
\end{array}
$$

## The SID Method

S stands for Simplify the expression on each side.
I stands for ISolate the variable.

Algebra I Solving Equations The SID Method

$$
\begin{array}{cc}
\text { 2. } \quad \mathbf{9 x}-\mathbf{3 x}+\mathbf{3}=\mathbf{2 7} & \text { Subtract } \mathbf{3} \\
\mathbf{6 x}+\mathbf{3}=\mathbf{2 7} & \text { from } \\
\mathbf{6 x}= & \text { each side. }
\end{array}
$$

## The SID Method

$\mathbf{S}$ stands for Simplify the expression on each side.
I stands for ISOlate the variable.

Algebra I Solving Equations The SID Method

$$
\text { 2. } \begin{array}{cc}
\mathbf{9 x}-\mathbf{3 x}+\mathbf{3}=\mathbf{2 7} & \text { Subtract } \mathbf{3} \\
\mathbf{6 x}+\mathbf{3}=\mathbf{2 7} & \text { from } \\
\mathbf{6 x}=\mathbf{2 4} & \text { each side. }
\end{array}
$$

## The SID Method

$\mathbf{S}$ stands for Simplify the expression on each side.
I stands for ISOlate the variable.

Algebra I Solving Equations The SID Method

$$
\text { 2. } \begin{gathered}
\mathbf{9 x}-\mathbf{3 x}+\mathbf{3}=\mathbf{2 7} \\
\mathbf{6 x}+\mathbf{3}=\mathbf{2 7} \\
\mathbf{6 x}=\mathbf{2 4}
\end{gathered}
$$

## The SID Method

$S$ stands for Simplify the expression on each side.
I stands for ISOlate the variable.

Algebra I Solving Equations The SID Method

$$
\text { 2. } \begin{gathered}
\mathbf{9 x}-\mathbf{3 x}+\mathbf{3}=\mathbf{2 7} \\
\mathbf{6 x}+\mathbf{3}=\mathbf{2 7} \\
\mathbf{6 x}=\mathbf{2 4}
\end{gathered}
$$

## The SID Method

S stands for Simplify the expression on each side.
I stands for ISolate the variable.
D stands for Divide both sides by the coefficient of $x$.

Algebra I Solving Equations The SID Method

$$
\text { 2. } \begin{gathered}
\mathbf{9 x}-\mathbf{3 x}+\mathbf{3}=\mathbf{2 7} \\
\mathbf{6 x}+\mathbf{3}=\mathbf{2 7} \\
\mathbf{6 x}=\mathbf{2 4}
\end{gathered}
$$

> Divide both sides by 6

## The SID Method

S stands for Simplify the expression on each side.
I stands for ISolate the variable.
D stands for Divide both sides by the coefficient of x .

Algebra I Solving Equations The SID Method

$$
\text { 2. } \quad \begin{gathered}
\mathbf{9 x}-\mathbf{3 x}+\mathbf{3}=\mathbf{2 7} \\
\mathbf{6 x}+\mathbf{3}=\mathbf{2 7} \\
\mathbf{6 x}=\mathbf{2 4} \\
\mathbf{x}=
\end{gathered}
$$

## Divide both sides by 6

## The SID Method

S stands for Simplify the expression on each side.
I stands for ISolate the variable.
D stands for Divide both sides by the coefficient of $x$.

Algebra I Solving Equations The SID Method

$$
\text { 2. } \quad \begin{array}{r}
\mathbf{9 x}-\mathbf{3 x}+\mathbf{3}=\mathbf{2 7} \\
\mathbf{6 x}+\mathbf{3}=\mathbf{2 7} \\
\mathbf{6 x}=\mathbf{2 4} \\
\mathbf{x}=\mathbf{4}
\end{array}
$$

## Divide both sides <br> by 6

## The SID Method

S stands for Simplify the expression on each side.
I stands for ISolate the variable.
D stands for Divide both sides by the coefficient of x .

Algebra I Solving Equations The SID Method

$$
\text { 2. } \quad \begin{array}{r}
\mathbf{9 x}-\mathbf{3 x}+\mathbf{3}=\mathbf{2 7} \\
\mathbf{6 x}+\mathbf{3}=\mathbf{2 7} \\
\mathbf{6 x}=\mathbf{2 4} \\
\mathbf{x}=\mathbf{4}
\end{array}
$$

## The SID Method

S stands for Simplify the expression on each side.
I stands for ISolate the variable.
D stands for Divide both sides by the coefficient of x .

Algebra I Solving Equations The SID Method
3. $\mathbf{2 x}+\mathbf{4 x}-\mathbf{3}=\mathbf{2 7}$

## The SID Method

Algebra I Solving Equations The SID Method
3. $\mathbf{2 x}+4 \mathrm{x}-\mathbf{3}=\mathbf{2 7}$

## The SID Method

S stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method
3. $\mathbf{2 x}+4 x-3=27$

## The SID Method

S stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method
3. $2 x+4 x-3=27$

6x

## The SID Method

S stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method

$$
\text { 3. } \quad 2 x+4 x-3=27
$$

## The SID Method

S stands for Simplify the expression on each side.

## Algebra I Solving Equations The SID Method

$$
\text { 3. } \begin{aligned}
2 x+4 x-3 & =27 \\
6 x-3 & =
\end{aligned}
$$

## The SID Method

S stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method

$$
\text { 3. } \begin{aligned}
\quad 2 x+4 x-3 & =27 \\
6 x-3 & =27
\end{aligned}
$$

## The SID Method

$\mathbf{S}$ stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method
3. $\mathbf{2 x}+4 \mathrm{x}-3=\mathbf{2 7}$

$$
6 x-3=27
$$

## The SID Method

S stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method

$$
\text { 3. } \begin{aligned}
2 x+4 x-3 & =27 \\
6 x-3 & =27
\end{aligned}
$$

## The SID Method

S stands for Simplify the expression on each side.
I stands for ISOlate the variable.

Algebra I Solving Equations The SID Method

$$
\text { 3. } \begin{aligned}
2 x+4 x-3 & =27 \\
6 x-3 & =27
\end{aligned}
$$

# Add 3 <br> to <br> each side. 

## The SID Method

S stands for Simplify the expression on each side.
I stands for ISOlate the variable.

Algebra I Solving Equations The SID Method

$$
\begin{array}{cc}
\text { 3. } 2 x+4 x-3=27 & \text { Add } 3 \\
6 x-3=27 & \text { to } \\
6 x= & \text { each side. }
\end{array}
$$

## The SID Method

S stands for Simplify the expression on each side.
I stands for ISolate the variable.

Algebra I Solving Equations The SID Method

$$
\text { 3. } \begin{gathered}
\mathbf{2 x}+4 \mathrm{x}-\mathbf{3}=\mathbf{2 7} \\
\mathbf{6 x}-\mathbf{3}=\mathbf{2 7} \\
\mathbf{6 x}=\mathbf{3 0}
\end{gathered}
$$

# Add 3 <br> to <br> each side. 

## The SID Method

S stands for Simplify the expression on each side.
I stands for ISOlate the variable.

Algebra I Solving Equations The SID Method

$$
\text { 3. } \begin{gathered}
\mathbf{2 x}+\mathbf{4 x}-\mathbf{3}=\mathbf{2 7} \\
\mathbf{6 x}-\mathbf{3}=\mathbf{2 7} \\
\mathbf{6 x}=\mathbf{3 0}
\end{gathered}
$$

## The SID Method

S stands for Simplify the expression on each side.
I stands for ISolate the variable.

Algebra I Solving Equations The SID Method

$$
\text { 3. } \begin{gathered}
\mathbf{2 x}+\mathbf{4 x}-\mathbf{3}=\mathbf{2 7} \\
\mathbf{6 x}-\mathbf{3}=\mathbf{2 7} \\
\mathbf{6 x}=\mathbf{3 0}
\end{gathered}
$$

## The SID Method

S stands for Simplify the expression on each side.
I stands for ISolate the variable.
D stands for Divide both sides by the coefficient of $x$.

Algebra I Solving Equations The SID Method

$$
\text { 3. } \begin{gathered}
\mathbf{2 x}+\mathbf{4 x}-\mathbf{3}=\mathbf{2 7} \\
\mathbf{6 x}-\mathbf{3}=\mathbf{2 7} \\
\mathbf{6 x}=\mathbf{3 0}
\end{gathered}
$$

## Divide both sides by 6

## The SID Method

S stands for Simplify the expression on each side.
I stands for ISolate the variable.
D stands for Divide both sides by the coefficient of $x$.

Algebra I Solving Equations The SID Method

$$
\text { 3. } \begin{gathered}
\mathbf{2 x}+4 \mathrm{x}-\mathbf{3}=\mathbf{2 7} \\
\mathbf{6 x}-\mathbf{3}=\mathbf{2 7} \\
\mathbf{6 x}=\mathbf{3 0} \\
\mathbf{x}=
\end{gathered}
$$

## Divide both sides <br> by 6

## The SID Method

S stands for Simplify the expression on each side.
I stands for ISolate the variable.
D stands for Divide both sides by the coefficient of x .

Algebra I Solving Equations The SID Method

$$
\text { 3. } \begin{gathered}
\mathbf{2 x}+4 x-3=27 \\
\mathbf{6 x}-\mathbf{3}=\mathbf{2 7} \\
\mathbf{6 x}=\mathbf{3 0} \\
\mathbf{x}=\mathbf{5}
\end{gathered}
$$

## Divide both sides by 6

## The SID Method

S stands for Simplify the expression on each side.
I stands for ISolate the variable.
D stands for Divide both sides by the coefficient of x .

Algebra I Solving Equations The SID Method

$$
\text { 3. } \quad \begin{gathered}
\mathbf{2 x}+4 x-3=27 \\
\mathbf{6 x}-\mathbf{3}=\mathbf{2 7} \\
\mathbf{6 x}=\mathbf{3 0} \\
\mathbf{x}=\mathbf{5}
\end{gathered}
$$

## The SID Method

S stands for Simplify the expression on each side.
I stands for ISolate the variable.
D stands for Divide both sides by the coefficient of $x$.

Algebra I Solving Equations The SID Method

$$
\text { 4. } \quad x+3 x-7=\mathbf{1 7}
$$

## The SID Method

Algebra I Solving Equations The SID Method

$$
\text { 4. } \quad x+3 x-7=\mathbf{1 7}
$$

## The SID Method

S stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method

$$
\text { 4. } x+\mathbf{3 x}-\mathbf{7}=\mathbf{1 7}
$$

## The SID Method

S stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method

$$
\begin{aligned}
& \text { 4. } \quad x+3 x-7=17 \\
& 4 x
\end{aligned}
$$

## The SID Method

S stands for Simplify the expression on each side.

## Algebra I Solving Equations The SID Method

$$
\begin{gathered}
\text { 4. } \quad x+3 x-7=\mathbf{1 7} \\
4 x-7
\end{gathered}
$$

## The SID Method

S stands for Simplify the expression on each side.

## Algebra I Solving Equations The SID Method

$$
\text { 4. } \begin{aligned}
\quad x+3 x-7 & =17 \\
4 x-7 & =
\end{aligned}
$$

## The SID Method

S stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method

$$
\text { 4. } \begin{array}{r}
x+3 x-7=17 \\
4 x-7=17
\end{array}
$$

## The SID Method

S stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method

$$
\text { 4. } \begin{array}{r}
x+3 x-7=17 \\
4 x-7=17
\end{array}
$$

## The SID Method

S stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method

$$
\text { 4. } \begin{array}{r}
x+3 x-7=17 \\
4 x-7=17
\end{array}
$$

## The SID Method

S stands for Simplify the expression on each side.
I stands for ISolate the variable.

Algebra I Solving Equations The SID Method

$$
\text { 4. } \begin{array}{r}
x+3 x-7=17 \\
4 x-7=17
\end{array}
$$

# Add 7 <br> to <br> each side. 

## The SID Method

S stands for Simplify the expression on each side.
I stands for ISolate the variable.

Algebra I Solving Equations The SID Method

$$
\text { 4. } \begin{array}{cc}
\mathbf{x}+\mathbf{3 x}-7=17 & \text { Add } 7 \\
\mathbf{4 x}-\mathbf{7}=\mathbf{1 7} & \text { to } \\
\mathbf{4 x}= & \text { each side. }
\end{array}
$$

## The SID Method

S stands for Simplify the expression on each side.
I stands for ISolate the variable.

Algebra I Solving Equations The SID Method

$$
\text { 4. } \begin{array}{r}
x+3 x-7=\mathbf{1 7} \\
\mathbf{4 x}-7=\mathbf{1 7} \\
\mathbf{4 x}=\mathbf{2 4}
\end{array}
$$

# Add 7 <br> to <br> each side. 

## The SID Method

S stands for Simplify the expression on each side.
I stands for ISOlate the variable.

Algebra I Solving Equations The SID Method

$$
\text { 4. } \begin{array}{r}
\mathbf{x}+\mathbf{3 x}-7=17 \\
\mathbf{4 x}-7=17 \\
\mathbf{4 x}=\mathbf{2 4}
\end{array}
$$

## The SID Method

S stands for Simplify the expression on each side.
I stands for ISOlate the variable.

Algebra I Solving Equations The SID Method

$$
\text { 4. } \begin{array}{r}
x+3 x-7=\mathbf{1 7} \\
\mathbf{4 x}-7=\mathbf{1 7} \\
\mathbf{4 x}=\mathbf{2 4}
\end{array}
$$

## The SID Method

S stands for Simplify the expression on each side.
I stands for ISOlate the variable.
D stands for Divide both sides by the coefficient of $x$.

Algebra I Solving Equations The SID Method

$$
\text { 4. } \begin{array}{r}
x+3 x-7=\mathbf{1 7} \\
4 x-7=17 \\
\mathbf{4 x}=\mathbf{2 4}
\end{array}
$$

> Divide both sides
> by 4

## The SID Method

S stands for Simplify the expression on each side.
I stands for ISolate the variable.
D stands for Divide both sides by the coefficient of $\mathbf{x}$.

Algebra I Solving Equations The SID Method

$$
\text { 4. } \begin{array}{r}
\mathbf{x}+\mathbf{3 x}-7=\mathbf{1 7} \\
\mathbf{4 x}-7=\mathbf{1 7} \\
\mathbf{4 x}=\mathbf{2 4} \\
\mathbf{x}=
\end{array}
$$

## Divide both sides <br> by 4

## The SID Method

S stands for Simplify the expression on each side.
I stands for ISOlate the variable.
D stands for Divide both sides by the coefficient of $x$.

Algebra I Solving Equations The SID Method

$$
\text { 4. } \begin{array}{r}
x+3 x-7=17 \\
4 x-7=17 \\
4 x=24 \\
\mathbf{x}=\mathbf{6}
\end{array}
$$

## Divide both sides <br> by 4

## The SID Method

S stands for Simplify the expression on each side.
I stands for ISOlate the variable.
D stands for Divide both sides by the coefficient of $x$.

Algebra I Solving Equations The SID Method

$$
\text { 4. } \begin{array}{r}
x+3 x-7=17 \\
4 x-7=17 \\
4 x=24 \\
\mathbf{x}=\mathbf{6}
\end{array}
$$

## The SID Method

S stands for Simplify the expression on each side.
I stands for ISOlate the variable.
D stands for Divide both sides by the coefficient of $x$.

Algebra I Solving Equations The SID Method
5. $\mathbf{3 x}+5+\mathbf{4 x}=\mathbf{1 9}$

## The SID Method

Algebra I Solving Equations The SID Method

$$
\text { 5. } \mathbf{3 x}+5+4 x=19
$$

## The SID Method

S stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method

$$
\text { 5. } \quad \mathbf{3 x}+5+4 x=19
$$

## The SID Method

S stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method

$$
\begin{aligned}
& \text { 5. } \quad 3 x+5+4 x=19 \\
& 7 x
\end{aligned}
$$

## The SID Method

S stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method

$$
\text { 5. } \begin{gathered}
3 x+5+4 x=19 \\
7 x+5
\end{gathered}
$$

## The SID Method

$\mathbf{S}$ stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method

$$
\text { 5. } \begin{aligned}
3 x+5+4 x & =19 \\
7 x & +5=
\end{aligned}
$$

## The SID Method

S stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method

$$
\text { 5. } \begin{array}{r}
3 x+5+4 x=19 \\
7 x+5=19
\end{array}
$$

## The SID Method

S stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method
5. $\mathbf{3 x}+5+4 x=19$

$$
7 x+5=19
$$

## The SID Method

$\mathbf{S}$ stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method

$$
\text { 5. } \quad \begin{array}{r}
3 x+5+4 x \\
=19 \\
7 x+5
\end{array}=19
$$

## The SID Method

S stands for Simplify the expression on each side.
I stands for ISOlate the variable.

Algebra I Solving Equations The SID Method

$$
\begin{array}{cc}
\text { 5. } \quad 3 x+5+4 x=19 & \text { Subtract } 5 \\
7 x+5=19 & \text { from } \\
\text { both sides. }
\end{array}
$$

## The SID Method

S stands for Simplify the expression on each side.
I stands for ISOlate the variable.

Algebra I Solving Equations The SID Method

$$
\begin{array}{cc}
\text { 5. } 3 x+5+4 x=19 & \text { Subtract } 5 \\
7 x+5=19 & \text { from } \\
7 x= & \text { both sides. }
\end{array}
$$

## The SID Method

S stands for Simplify the expression on each side.
I stands for ISOlate the variable.

Algebra I Solving Equations The SID Method

$$
\text { 5. } \quad \mathbf{3 x + 5 + 4 x = 1 9} \begin{gathered}
7 x+5=19 \\
7 x=14
\end{gathered}
$$

Subtract 5
from
both sides.

## The SID Method

S stands for Simplify the expression on each side.
I stands for ISOlate the variable.

Algebra I Solving Equations The SID Method

$$
\begin{aligned}
& \text { 5. } \mathbf{3 x}+5+4 x=19 \\
& 7 x+5=19 \\
& 7 x=14
\end{aligned}
$$

## The SID Method

S stands for Simplify the expression on each side.
I stands for ISOlate the variable.

Algebra I Solving Equations The SID Method

$$
\begin{aligned}
& \text { 5. } \mathbf{3 x}+5+4 x=19 \\
& 7 x+5=19 \\
& 7 x=14
\end{aligned}
$$

## The SID Method

S stands for Simplify the expression on each side.
I stands for ISolate the variable.
D stands for Divide both sides by the coefficient of $x$.

Algebra I Solving Equations The SID Method

$$
\begin{gathered}
\text { 5. } \quad 3 x+5+4 x=19 \\
7 x+5=19 \\
7 x=14
\end{gathered}
$$

> Divide both sides
> by 7

## The SID Method

S stands for Simplify the expression on each side.
I stands for ISolate the variable.
D stands for Divide both sides by the coefficient of x .

Algebra I Solving Equations The SID Method

$$
\begin{aligned}
& \text { 5. } \mathbf{3 x}+5+4 x=19 \\
& 7 \mathrm{x}+5=19 \\
& 7 x=14 \\
& \mathbf{x}=
\end{aligned}
$$

## Divide both sides <br> by 7

## The SID Method

S stands for Simplify the expression on each side.
I stands for ISolate the variable.
D stands for Divide both sides by the coefficient of x .

Algebra I Solving Equations The SID Method

$$
\begin{aligned}
& \text { 5. } 3 x+5+4 x=19 \\
& 7 x+5=19 \\
& 7 x=14 \\
& x=2
\end{aligned}
$$

## Divide both sides <br> by 7

## The SID Method

S stands for Simplify the expression on each side.
I stands for ISolate the variable.
D stands for Divide both sides by the coefficient of $x$.

Algebra I Solving Equations The SID Method

$$
\text { 5. } \quad \mathbf{3 x + 5 + 4 x = 1 9} \begin{gathered}
7 x+5=19 \\
7 x=14 \\
x=2
\end{gathered}
$$

## The SID Method

S stands for Simplify the expression on each side.
I stands for ISOlate the variable.
D stands for Divide both sides by the coefficient of $x$.

Algebra I Solving Equations The SID Method

$$
\text { 6. } \quad 2 x+1+x=19
$$

## The SID Method

Algebra I Solving Equations The SID Method

$$
\text { 6. } \quad 2 x+1+x=19
$$

## The SID Method

S stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method

$$
\text { 6. } \quad \stackrel{\sqrt{2 x}+1+x}{x}=19
$$

## The SID Method

S stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method

$$
\text { 6. } \quad \stackrel{\downarrow}{2 \mathrm{x}+1+\mathrm{x}}=19
$$

## The SID Method

S stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method

$$
\text { 6. } \quad \begin{gathered}
\stackrel{\rightharpoonup}{2 x}+1+x \\
3 x+1
\end{gathered}
$$

## The SID Method

S stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method

$$
\text { 6. } \quad \begin{gathered}
\sqrt{2} \\
\\
\mathbf{3 x}+1+\mathbf{x}=19
\end{gathered}
$$

## The SID Method

S stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method

$$
\begin{aligned}
& \downarrow \text {, } \\
& \text { 6. } 2 \mathrm{x}+1+\mathbf{x}=19 \\
& 3 \mathrm{x}+1=19
\end{aligned}
$$

## The SID Method

S stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method

$$
\text { 6. } \begin{array}{r}
\mathbf{2 x}+1+x=19 \\
3 \mathrm{x}+1=19
\end{array}
$$

## The SID Method

$\mathbf{S}$ stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method

$$
\text { 6. } \begin{array}{r}
\mathbf{2 x}+1+x=19 \\
3 \mathrm{x}+1=19
\end{array}
$$

## The SID Method

S stands for Simplify the expression on each side.
I stands for ISOlate the variable.

Algebra I Solving Equations The SID Method

$$
\text { 6. } \quad \begin{array}{r}
2 \mathrm{x}+1+\mathrm{x}=19 \\
3 \mathrm{x}+1=19
\end{array}
$$

# Subtract 1 <br> from <br> both sides. 

## The SID Method

S stands for Simplify the expression on each side.
I stands for ISOlate the variable.

Algebra I Solving Equations The SID Method

$$
\text { 6. } \quad \begin{gathered}
2 x+1+x=19 \\
3 x+1=19 \\
3 x=
\end{gathered}
$$

## Subtract 1 <br> from <br> both sides.

## The SID Method

S stands for Simplify the expression on each side.
I stands for ISOlate the variable.

Algebra I Solving Equations The SID Method

$$
\text { 6. } \quad \mathbf{2 x + 1 + x = 1 9} \begin{gathered}
3 x+1=19 \\
3 x=18
\end{gathered}
$$

## Subtract 1 <br> from <br> both sides.

## The SID Method

S stands for Simplify the expression on each side.
I stands for ISOlate the variable.

Algebra I Solving Equations The SID Method

$$
\text { 6. } \quad \begin{gathered}
\mathbf{2 x}+1+\mathrm{x}=19 \\
\mathbf{3 x}+\mathbf{1}=19 \\
\mathbf{3 x}=\mathbf{1 8}
\end{gathered}
$$

## The SID Method

S stands for Simplify the expression on each side.
I stands for ISOlate the variable.

Algebra I Solving Equations The SID Method

$$
\text { 6. } \quad \begin{gathered}
\mathbf{2 x}+1+\mathrm{x}=19 \\
\mathbf{3 x}+\mathbf{1}=19 \\
\mathbf{3 x}=\mathbf{1 8}
\end{gathered}
$$

## The SID Method

S stands for Simplify the expression on each side.
I stands for ISolate the variable.
D stands for Divide both sides by the coefficient of x .

Algebra I Solving Equations The SID Method

$$
\text { 6. } \quad \begin{gathered}
\mathbf{x}+1+\mathrm{x}=19 \\
3 \mathrm{x}+1=19 \\
\mathbf{3 x}=18
\end{gathered}
$$

## Divide both sides <br> by 3

## The SID Method

$\mathbf{S}$ stands for Simplify the expression on each side.
I stands for ISolate the variable.
D stands for Divide both sides by the coefficient of x .

Algebra I Solving Equations The SID Method

$$
\text { 6. } \quad \mathbf{2 x + 1 + x = 1 9} \begin{gathered}
\mathbf{3 x}+\mathbf{1}=19 \\
\mathbf{3 x}=\mathbf{1 8} \\
\mathbf{x}=
\end{gathered}
$$

## Divide both sides <br> by 3

## The SID Method

S stands for Simplify the expression on each side.
I stands for ISolate the variable.
D stands for Divide both sides by the coefficient of $\mathbf{x}$.

Algebra I Solving Equations The SID Method

$$
\text { 6. } \quad \mathbf{2 x + 1 + x = 1 9} \begin{gathered}
3 x+1=19 \\
3 x=18
\end{gathered}
$$

Divide
both sides

$$
\text { by } 3
$$

## The SID Method

$\mathbf{S}$ stands for Simplify the expression on each side.
I stands for ISolate the variable.
D stands for Divide both sides by the coefficient of x .

Algebra I Solving Equations The SID Method

$$
\text { 6. } \quad \begin{gathered}
2 \mathrm{x}+1+\mathrm{x}=19 \\
3 \mathrm{x}+1=19 \\
3 \mathrm{x}=18 \\
\mathrm{x}=6
\end{gathered}
$$

## The SID Method

S stands for Simplify the expression on each side.
I stands for ISolate the variable.
D stands for Divide both sides by the coefficient of x .

Algebra I Solving Equations The SID Method

$$
\text { 7. } 6 x+2-3 x=26
$$

## The SID Method

Algebra I Solving Equations The SID Method

$$
\text { 7. } 6 x+2-3 x=26
$$

## The SID Method

S stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method

$$
\text { 7. } 6 x+2-3 x=26
$$

## The SID Method

S stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method

$$
\begin{aligned}
& \text { 7. } \quad 6 x+2-3 x=26 \\
& 3 x
\end{aligned}
$$

## The SID Method

S stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method

$$
\text { 7. } \quad 6 x+2-3 x=26
$$

## The SID Method

S stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method

$$
\text { 7. } \quad \begin{gathered}
6 x+2-3 x=26 \\
3 x+2=
\end{gathered}
$$

## The SID Method

S stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method

$$
\text { 7. } \quad \begin{gathered}
6 x+2-3 x=26 \\
3 x+2=26
\end{gathered}
$$

## The SID Method

S stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method

$$
\text { 7. } \quad \begin{gathered}
6 x+2-3 x=26 \\
3 x+2=26
\end{gathered}
$$

## The SID Method

S stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method

$$
\text { 7. } \quad \begin{gathered}
6 x+2-3 x=26 \\
3 x+2=26
\end{gathered}
$$

## The SID Method

S stands for Simplify the expression on each side.
I stands for ISOlate the variable.

Algebra I Solving Equations The SID Method

$$
\begin{array}{cc}
\text { 7. } \quad 6 x+2-3 x=26 & \text { Subtract } 2 \\
3 x+2=26 & \text { from } \\
& \text { both sides. }
\end{array}
$$

## The SID Method

S stands for Simplify the expression on each side.
I stands for ISOlate the variable.

Algebra I Solving Equations The SID Method

$$
\text { 7. } \quad \mathbf{6 x + 2 - 3 x = 2 6}+\begin{gathered}
3 x+2=26 \\
3 x=
\end{gathered}
$$

Subtract 2
from
both sides.

## The SID Method

S stands for Simplify the expression on each side.
I stands for ISOlate the variable.

Algebra I Solving Equations The SID Method

$$
\text { 7. } \begin{gathered}
6 x+2-3 x=26 \\
3 x+2=26 \\
3 x=24
\end{gathered}
$$

Subtract 2
from
both sides.

## The SID Method

S stands for Simplify the expression on each side.
I stands for ISolate the variable.

Algebra I Solving Equations The SID Method

$$
\text { 7. } \begin{gathered}
6 x+2-3 x=26 \\
3 x+2=26 \\
3 x=24
\end{gathered}
$$

## The SID Method

$\mathbf{S}$ stands for Simplify the expression on each side.
I stands for ISOlate the variable.

Algebra I Solving Equations The SID Method

$$
\text { 7. } \begin{gathered}
6 x+2-3 x=26 \\
3 x+2=26 \\
3 x=24
\end{gathered}
$$

## The SID Method

S stands for Simplify the expression on each side.
I stands for ISolate the variable.
D stands for Divide both sides by the coefficient of $\mathbf{x}$.

Algebra I Solving Equations The SID Method

$$
\text { 7. } \begin{gathered}
6 x+2-3 x=26 \\
3 x+2=26 \\
3 x=24
\end{gathered}
$$

> Divide both sides by 3

## The SID Method

S stands for Simplify the expression on each side.
I stands for ISolate the variable.
D stands for Divide both sides by the coefficient of $x$.

Algebra I Solving Equations The SID Method

$$
\text { 7. } \quad \mathbf{6 x}+2-3 x=26
$$

## Divide both sides <br> by 3

## The SID Method

S stands for Simplify the expression on each side.
I stands for ISolate the variable.
D stands for Divide both sides by the coefficient of x .

Algebra I Solving Equations The SID Method

$$
\text { 7. } \begin{gathered}
6 x+2-3 x=26 \\
3 x+2=26 \\
3 x=24
\end{gathered}
$$

Divide
both sides

$$
\text { by } 3
$$

## The SID Method

S stands for Simplify the expression on each side.
I stands for ISolate the variable.
D stands for Divide both sides by the coefficient of x .

Algebra I Solving Equations The SID Method

$$
\text { 7. } \quad \begin{gathered}
6 x+2-3 x=26 \\
3 x+2=26 \\
3 x=24 \\
x=8
\end{gathered}
$$

## The SID Method

S stands for Simplify the expression on each side.
I stands for ISolate the variable.
D stands for Divide both sides by the coefficient of x .

Algebra I Solving Equations The SID Method
8. $\mathbf{7 x}+\mathbf{1 0}-\mathbf{2 x}=\mathbf{3 5}$

## The SID Method

Algebra I Solving Equations The SID Method
8. $\mathbf{7 x}+\mathbf{1 0}-\mathbf{2 x}=\mathbf{3 5}$

## The SID Method

S stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method

8. $\mathbf{7 x}+\mathbf{1 0}-\mathbf{2 x}=\mathbf{3 5}$

## The SID Method

S stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method

8. $\mathbf{7 x}+\mathbf{1 0}-\mathbf{2 x}=\mathbf{3 5}$

$$
5 x
$$

## The SID Method

S stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method

8. $\mathbf{7 x}+\mathbf{1 0}-\mathbf{2 x}=\mathbf{3 5}$

$$
5 x+10
$$

## The SID Method

S stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method

8. $\mathbf{7 x}+\mathbf{1 0}-\mathbf{2 x}=\mathbf{3 5}$

$$
5 x+10=
$$

## The SID Method

S stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method

8. $\mathbf{7 x}+\mathbf{1 0}-\mathbf{2 x}=\mathbf{3 5}$

$$
5 x+10=35
$$

## The SID Method

S stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method

$$
\text { 8. } \begin{array}{r}
7 x+10-2 x=35 \\
5 x+10=35
\end{array}
$$

## The SID Method

S stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method

$$
\text { 8. } \begin{aligned}
7 x & +10-2 x=35 \\
5 x & +10=35
\end{aligned}
$$

## The SID Method

S stands for Simplify the expression on each side.
I stands for ISolate the variable.

Algebra I Solving Equations The SID Method

$$
\begin{array}{cc}
\text { 8. } & 7 x+10-2 x=35 \\
5 x+10=35 & \begin{array}{c}
\text { Subtract } 10 \\
\text { from } \\
\text { both sides. }
\end{array}
\end{array}
$$

## The SID Method

S stands for Simplify the expression on each side.
I stands for ISolate the variable.

Algebra I Solving Equations The SID Method

$$
\begin{array}{cc}
\text { 8. } & \mathbf{x}+10-\mathbf{x}=\mathbf{3 5} \\
5 \mathrm{x}+10=35 & \text { Subtract } 10 \\
\mathbf{5 x}= & \text { from } \\
& \text { both sides. }
\end{array}
$$

## The SID Method

S stands for Simplify the expression on each side.
I stands for ISolate the variable.

Algebra I Solving Equations The SID Method

$$
\begin{array}{cc}
\text { 8. } & \mathbf{x}+10-\mathbf{x}=\mathbf{3 5} \\
\mathbf{5 x}+\mathbf{1 0}=\mathbf{3 5} & \text { Subtract } 10 \\
\mathbf{5 x}=\mathbf{2 5} & \text { from } \\
& \text { both sides. }
\end{array}
$$

## The SID Method

S stands for Simplify the expression on each side.
I stands for ISolate the variable.

Algebra I Solving Equations The SID Method

$$
\text { 8. } \begin{gathered}
\mathbf{7 x}+\mathbf{1 0}-\mathbf{2 x}=\mathbf{3 5} \\
\mathbf{5 x}+\mathbf{1 0}=\mathbf{3 5} \\
\mathbf{5 x}=\mathbf{2 5}
\end{gathered}
$$

## The SID Method

S stands for Simplify the expression on each side.
I stands for ISOlate the variable.

Algebra I Solving Equations The SID Method

$$
\text { 8. } \begin{gathered}
\mathbf{x}+10-\mathbf{x}=\mathbf{3 5} \\
\mathbf{5 x}+\mathbf{1 0}=\mathbf{3 5} \\
\mathbf{5 x}=\mathbf{2 5}
\end{gathered}
$$

## The SID Method

S stands for Simplify the expression on each side.
I stands for ISolate the variable.
D stands for Divide both sides by the coefficient of x .

Algebra I Solving Equations The SID Method

$$
\begin{gathered}
\text { 8. } \mathbf{7 x}+\mathbf{1 0}-\mathbf{2 x}=\mathbf{3 5} \\
\mathbf{5 x}+\mathbf{1 0}=\mathbf{3 5} \\
\mathbf{5 x}=\mathbf{2 5}
\end{gathered}
$$

Divide both sides
by 5

## The SID Method

S stands for Simplify the expression on each side.
I stands for ISolate the variable.
D stands for Divide both sides by the coefficient of $x$.

Algebra I Solving Equations The SID Method

$$
\text { 8. } \begin{gathered}
\mathbf{7 x}+\mathbf{1 0}-\mathbf{2 x}=\mathbf{3 5} \\
\mathbf{5 x}+\mathbf{1 0}=\mathbf{3 5} \\
\mathbf{5 x}=\mathbf{2 5} \\
\mathbf{x}=
\end{gathered}
$$

## Divide both sides <br> by 5

## The SID Method

S stands for Simplify the expression on each side.
I stands for ISOlate the variable.
D stands for Divide both sides by the coefficient of $x$.

Algebra I Solving Equations The SID Method

$$
\text { 8. } \begin{gathered}
7 x+10-2 x=35 \\
5 x+10=35 \\
5 x=25 \\
x=5
\end{gathered}
$$

$$
\begin{aligned}
& \text { Divide } \\
& \text { both sides } \\
& \text { by } 5
\end{aligned}
$$

## The SID Method

S stands for Simplify the expression on each side.
I stands for ISolate the variable.
D stands for Divide both sides by the coefficient of x .

Algebra I Solving Equations The SID Method

$$
\text { 8. } \begin{gathered}
7 x+10-2 x=35 \\
5 x+10=\mathbf{3 5} \\
\mathbf{5 x}=\mathbf{2 5} \\
x=5
\end{gathered}
$$

## The SID Method

S stands for Simplify the expression on each side.
I stands for ISolate the variable.
D stands for Divide both sides by the coefficient of $\mathbf{x}$.

Algebra I Solving Equations The SID Method

$$
\text { 9. } \quad 3 x-4+4 x=24
$$

## The SID Method

Algebra I Solving Equations The SID Method

$$
\text { 9. } \quad 3 x-4+4 x=24
$$

## The SID Method

S stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method

$$
\text { 9. } \quad 3 x-4+4 x=24
$$

## The SID Method

S stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method

$7 x$

## The SID Method

S stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method

$$
\text { 9. } \begin{gathered}
3 x-4+4 x=24 \\
7 x-4
\end{gathered}
$$

## The SID Method

S stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method

$$
\text { 9. } \begin{gathered}
3 x-4+4 x=24 \\
7 x-4=
\end{gathered}
$$

## The SID Method

S stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method

$$
\text { 9. } \begin{array}{r}
3 x-4+4 x=24 \\
7 x-4=24
\end{array}
$$

## The SID Method

$\mathbf{S}$ stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method

$$
\text { 9. } \begin{gathered}
3 x-4+4 x=24 \\
7 x-4=24
\end{gathered}
$$

## The SID Method

S stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method

$$
\text { 9. } \begin{array}{r}
3 x-4+4 x=24 \\
7 x-4=24
\end{array}
$$

## The SID Method

S stands for Simplify the expression on each side.
I stands for ISOlate the variable.

Algebra I Solving Equations The SID Method

$$
\text { 9. } \begin{array}{r}
3 x-4+4 x=24 \\
7 x-4=24
\end{array}
$$

# Add 4 <br> to <br> both sides. 

## The SID Method

S stands for Simplify the expression on each side.
I stands for ISOlate the variable.

Algebra I Solving Equations The SID Method

$$
\begin{gathered}
\text { 9. } \quad 3 x-4+4 x=24 \\
7 x-4=24 \\
7 x=
\end{gathered}
$$

$$
\begin{gathered}
\text { Add } 4 \\
\text { to } \\
\text { both sides. }
\end{gathered}
$$

## The SID Method

S stands for Simplify the expression on each side.
I stands for ISOlate the variable.

Algebra I Solving Equations The SID Method

$$
\text { 9. } \begin{gathered}
\mathbf{3 x}-4+4 x=24 \\
7 x-4=\mathbf{2 4} \\
\mathbf{7 x}=\mathbf{2 8}
\end{gathered}
$$

Add 4 to both sides.

## The SID Method

$\mathbf{S}$ stands for Simplify the expression on each side.
I stands for ISolate the variable.

Algebra I Solving Equations The SID Method

$$
\text { 9. } \begin{gathered}
\mathbf{3 x}-4+4 x=24 \\
7 x-4=24 \\
7 x=28
\end{gathered}
$$

## The SID Method

S stands for Simplify the expression on each side.
I stands for ISOlate the variable.

Algebra I Solving Equations The SID Method

$$
\text { 9. } \begin{gathered}
\mathbf{3 x}-4+4 x=24 \\
7 x-4=24 \\
7 x=28
\end{gathered}
$$

## The SID Method

S stands for Simplify the expression on each side.
I stands for ISolate the variable.
D stands for Divide both sides by the coefficient of $x$.

Algebra I Solving Equations The SID Method

$$
\text { 9. } \begin{gathered}
\mathbf{3 x}-4+4 x=24 \\
7 x-4=24 \\
7 x=28
\end{gathered}
$$

> Divide both sides
> by 7

## The SID Method

$\mathbf{S}$ stands for Simplify the expression on each side.
I stands for ISolate the variable.
D stands for Divide both sides by the coefficient of x .

Algebra I Solving Equations The SID Method

$$
\text { 9. } \begin{gathered}
\mathbf{3 x}-\mathbf{4}+\mathbf{4 x}=\mathbf{2 4} \\
7 x-4=\mathbf{2 4} \\
7 x=28 \\
x=
\end{gathered}
$$

> Divide both sides
> by 7

## The SID Method

S stands for Simplify the expression on each side.
I stands for ISolate the variable.
D stands for Divide both sides by the coefficient of x .

Algebra I Solving Equations The SID Method

$$
\text { 9. } \begin{aligned}
& \mathbf{3 x}-4+4 x=24 \\
& 7 x-4=24 \\
& 7 x=28 \\
& x=4
\end{aligned}
$$

## The SID Method

$\mathbf{S}$ stands for Simplify the expression on each side.
I stands for ISolate the variable.
D stands for Divide both sides by the coefficient of x .

Algebra I Solving Equations The SID Method

$$
\text { 9. } \begin{aligned}
& \mathbf{3 x}-4+4 x=24 \\
& 7 x-4=24 \\
& 7 x=28 \\
& x=4
\end{aligned}
$$

## The SID Method

S stands for Simplify the expression on each side.
I stands for ISolate the variable.
D stands for Divide both sides by the coefficient of $x$.

Algebra I Solving Equations The SID Method

$$
\text { 10. } \mathbf{8 x}-\mathbf{3}+\mathbf{2 x}=\mathbf{4 7}
$$

## The SID Method

Algebra I Solving Equations The SID Method

$$
\text { 10. } \mathbf{8 x}-\mathbf{3}+\mathbf{2 x}=\mathbf{4 7}
$$

## The SID Method

S stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method

$$
\text { 10. } \quad 8 x-3+2 x=47
$$

## The SID Method

S stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method

$$
\begin{aligned}
& \text { 10. } \quad 8 x-3+2 x=47 \\
& 10 x
\end{aligned}
$$

## The SID Method

S stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method

$$
\text { 10. } \begin{gathered}
\sqrt[8]{8 x-3}+\mathbf{2 x}=47 \\
\\
\mathbf{1 0 x}-\mathbf{3}
\end{gathered}
$$

## The SID Method

S stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method

$$
\text { 10. } \begin{gathered}
\sqrt{8 x-3}+\mathbf{2 x}=47 \\
\\
\mathbf{1 0 x}-\mathbf{3}=
\end{gathered}
$$

## The SID Method

S stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method

$$
\begin{gathered}
\text { 10. } \quad 8 x-3+2 x=47 \\
10 x-3=47
\end{gathered}
$$

## The SID Method

S stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method

$$
\begin{gathered}
\text { 10. } \quad 8 x-3+2 x=47 \\
10 x-3=47
\end{gathered}
$$

## The SID Method

S stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method

$$
\begin{gathered}
\text { 10. } \quad 8 x-3+2 x=47 \\
10 x-3=47
\end{gathered}
$$

## The SID Method

S stands for Simplify the expression on each side.
I stands for ISOlate the variable.

Algebra I Solving Equations The SID Method

$$
\begin{array}{c|c}
\text { 10. } 8 \mathrm{x}-\mathbf{3}+\mathbf{2 x}=\mathbf{4 7} & \text { Add } 3 \\
\mathbf{1 0 x}-\mathbf{3}=\mathbf{4 7} & \text { to } \\
& \text { both sides. }
\end{array}
$$

## The SID Method

S stands for Simplify the expression on each side.
I stands for ISOlate the variable.

Algebra I Solving Equations The SID Method

$$
\begin{array}{cc}
\text { 10. } 8 \mathrm{x}-\mathbf{3}+\mathbf{2 x}=\mathbf{4 7} & \text { Add } \mathbf{3} \\
\mathbf{1 0 x}-\mathbf{3}=\mathbf{4 7} & \text { to } \\
\mathbf{1 0 x}= & \text { both sides. }
\end{array}
$$

## The SID Method

S stands for Simplify the expression on each side.
I stands for ISolate the variable.

Algebra I Solving Equations The SID Method

$$
\begin{array}{cc}
\text { 10. } \mathbf{8 x}-\mathbf{3}+\mathbf{2 x}=\mathbf{4 7} & \text { Add } \mathbf{3} \\
\mathbf{1 0 x}-\mathbf{3}=\mathbf{4 7} & \text { to } \\
\mathbf{1 0 x}=\mathbf{5 0} & \text { both sides. }
\end{array}
$$

## The SID Method

S stands for Simplify the expression on each side.
I stands for ISOlate the variable.

Algebra I Solving Equations The SID Method

$$
\begin{gathered}
\text { 10. } \quad \mathbf{8 x}-\mathbf{3}+\mathbf{2 x}=\mathbf{4 7} \\
\mathbf{1 0 x}-\mathbf{3}=\mathbf{4 7} \\
\mathbf{1 0 x}=\mathbf{5 0}
\end{gathered}
$$

## The SID Method

S stands for Simplify the expression on each side.
I stands for ISOlate the variable.

Algebra I Solving Equations The SID Method

$$
\begin{gathered}
\text { 10. } \quad \mathbf{8 x}-\mathbf{3}+\mathbf{2 x}=\mathbf{4 7} \\
\mathbf{1 0 x}-\mathbf{3}=\mathbf{4 7} \\
\mathbf{1 0 x}=\mathbf{5 0}
\end{gathered}
$$

## The SID Method

$\mathbf{S}$ stands for Simplify the expression on each side.
I stands for ISolate the variable.
D stands for Divide both sides by the coefficient of $x$.

Algebra I Solving Equations The SID Method

$$
\begin{array}{cc}
\text { 10. } \mathbf{8 x}-\mathbf{3}+\mathbf{2 x}=\mathbf{4 7} & \text { Divide } \\
\mathbf{1 0 x}-\mathbf{3}=\mathbf{4 7} & \text { both sides } \\
\mathbf{1 0 x}=\mathbf{5 0} & \text { by } \mathbf{1 0}
\end{array}
$$

## The SID Method

S stands for Simplify the expression on each side.
I stands for ISolate the variable.
D stands for Divide both sides by the coefficient of $x$.

Algebra I Solving Equations The SID Method

$$
\begin{array}{cc}
\text { 10. } \mathbf{8 x}-\mathbf{3}+\mathbf{2 x}=\mathbf{4 7} & \text { Divide } \\
\mathbf{1 0 x}-\mathbf{3}=\mathbf{4 7} & \text { both sides } \\
\mathbf{1 0 x}=\mathbf{5 0} & \text { by } \mathbf{1 0} \\
\mathbf{x}= &
\end{array}
$$

## The SID Method

S stands for Simplify the expression on each side.
I stands for ISolate the variable.
D stands for Divide both sides by the coefficient of x .

Algebra I Solving Equations The SID Method

$$
\begin{gathered}
\text { 10. } \quad \mathbf{8 x}-\mathbf{3}+\mathbf{2 x}=\mathbf{4 7} \\
\mathbf{1 0 x}-\mathbf{3}=\mathbf{4 7} \\
\mathbf{1 0 x}=\mathbf{5 0} \\
\mathbf{x}=\mathbf{5}
\end{gathered}
$$

## Divide both sides <br> by 10

## The SID Method

S stands for Simplify the expression on each side.
I stands for ISolate the variable.
D stands for Divide both sides by the coefficient of $x$.

Algebra I Solving Equations The SID Method

$$
\begin{gathered}
\text { 10. } \quad \mathbf{8 x}-\mathbf{3}+\mathbf{2 x}=\mathbf{4 7} \\
\mathbf{1 0 x}-\mathbf{3}=\mathbf{4 7} \\
\mathbf{1 0 x}=\mathbf{5 0} \\
\mathbf{x}=\mathbf{5}
\end{gathered}
$$

## The SID Method

S stands for Simplify the expression on each side.
I stands for ISolate the variable.
D stands for Divide both sides by the coefficient of $x$.

Algebra I Solving Equations The SID Method
11. $\mathbf{8 x}-\mathbf{1}-\mathbf{4 x}=\mathbf{2 3}$

## The SID Method

## Algebra I Solving Equations The SID Method

$$
\text { 11. } 8 x-1-4 x=23
$$

## The SID Method

S stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method
11. $\mathbf{8 x}-1-4 x=23$

## The SID Method

S stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method

$$
\begin{aligned}
& \text { 11. } \quad 8 x-1-4 x=23 \\
& 4 x
\end{aligned}
$$

## The SID Method

S stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method

$$
\begin{aligned}
& \text { 11. } \quad \mathbf{8 x}-1-4 x=23 \\
& 4 x-1
\end{aligned}
$$

## The SID Method

S stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method

$$
\begin{gathered}
\text { 11. } \quad \mathbf{8 x}-1-4 x=\mathbf{x} \\
4 x-1=
\end{gathered}
$$

## The SID Method

S stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method

$$
\begin{gathered}
\text { 11. } \mathbf{8 x}-1-4 x=23 \\
4 x-1=23
\end{gathered}
$$

## The SID Method

S stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method

$$
\begin{gathered}
\text { 11. } \mathbf{8 x}-1-4 x=23 \\
4 x-1=23
\end{gathered}
$$

## The SID Method

$\mathbf{S}$ stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method

$$
\begin{gathered}
\text { 11. } \mathbf{8 x}-1-4 \mathrm{x}=\mathbf{2 3} \\
4 \mathrm{x}-1=\mathbf{2 3}
\end{gathered}
$$

## The SID Method

S stands for Simplify the expression on each side.
I stands for ISolate the variable.

Algebra I Solving Equations The SID Method

$$
\begin{array}{cc}
\text { 11. } 8 x-1-4 x=23 & \text { Add } 1 \\
4 x-1=23 & \text { to } \\
& \text { both sides. }
\end{array}
$$

## The SID Method

S stands for Simplify the expression on each side.
I stands for ISOlate the variable.

Algebra I Solving Equations The SID Method

$$
\begin{array}{cc}
\text { 11. } 8 x-1-4 x=23 & \text { Add } 1 \\
4 x-1=23 & \text { to } \\
4 x= & \text { both sides. }
\end{array}
$$

## The SID Method

S stands for Simplify the expression on each side.
I stands for ISOlate the variable.

Algebra I Solving Equations The SID Method

$$
\begin{array}{cc}
\text { 11. } 8 x-1-4 x=23 & \text { Add } 1 \\
4 x-1=23 & \text { to } \\
4 x=24 & \text { both sides. }
\end{array}
$$

## The SID Method

$\mathbf{S}$ stands for Simplify the expression on each side.
I stands for ISolate the variable.

Algebra I Solving Equations The SID Method

$$
\begin{gathered}
\text { 11. } \mathbf{8 x}-\mathbf{1}-\mathbf{4 x}=\mathbf{2 3} \\
\mathbf{4 x}-\mathbf{1}=\mathbf{2 3} \\
\mathbf{4 x}=\mathbf{2 4}
\end{gathered}
$$

## The SID Method

S stands for Simplify the expression on each side.
I stands for ISolate the variable.

Algebra I Solving Equations The SID Method

$$
\begin{gathered}
\text { 11. } \mathbf{8 x}-\mathbf{1}-\mathbf{4 x}=\mathbf{2 3} \\
\mathbf{4 x}-\mathbf{1}=\mathbf{2 3} \\
\mathbf{4 x}=\mathbf{2 4}
\end{gathered}
$$

## The SID Method

S stands for Simplify the expression on each side.
I stands for ISolate the variable.
D stands for Divide both sides by the coefficient of $x$.

Algebra I Solving Equations The SID Method

$$
\begin{array}{c|c}
\text { 11. } \mathbf{8 x}-\mathbf{1}-\mathbf{4 x}=\mathbf{2 3} & \text { Divide } \\
\mathbf{4 x}-\mathbf{1}=\mathbf{2 3} & \text { both sides } \\
\mathbf{4 x}=\mathbf{2 4} & \text { by } \mathbf{4}
\end{array}
$$

## The SID Method

S stands for Simplify the expression on each side.
I stands for ISolate the variable.
D stands for Divide both sides by the coefficient of $x$.

Algebra I Solving Equations The SID Method

$$
\text { 11. } \begin{array}{cc}
\mathbf{8 x}-1-4 \mathrm{x}=23 & \text { Divide } \\
\mathbf{4 x}-\mathbf{1}=\mathbf{2 3} & \text { both sides } \\
\mathbf{4 x}=\mathbf{2 4} & \text { by } 4 \\
\mathbf{x}= &
\end{array}
$$

## The SID Method

$\mathbf{S}$ stands for Simplify the expression on each side.
I stands for ISolate the variable.
D stands for Divide both sides by the coefficient of x .

Algebra I Solving Equations The SID Method

$$
\text { 11. } \begin{array}{cc}
\mathbf{8 x}-1-4 \mathrm{x}=23 & \text { Divide } \\
\mathbf{4 x}-\mathbf{1}=\mathbf{2 3} & \text { both sides } \\
\mathbf{4 x}=\mathbf{2 4} & \text { by } 4 \\
\mathbf{x}=6 &
\end{array}
$$

## The SID Method

S stands for Simplify the expression on each side.
I stands for ISolate the variable.
D stands for Divide both sides by the coefficient of $x$.

Algebra I Solving Equations The SID Method

$$
\begin{aligned}
& \text { 11. } \mathbf{8 x}-\mathbf{1}-\mathbf{4 x}=\mathbf{2 3} \\
& 4 \mathrm{x}-1=23 \\
& 4 x=24 \\
& x=6
\end{aligned}
$$

## The SID Method

S stands for Simplify the expression on each side.
I stands for ISolate the variable.
D stands for Divide both sides by the coefficient of $x$.

Algebra I Solving Equations The SID Method
12. $\mathbf{6 x}-\mathbf{7}-\mathbf{x}=\mathbf{3 3}$

The SID Method

Algebra I Solving Equations The SID Method
12. $\mathbf{6 x}-\mathbf{7}-\mathbf{x}=\mathbf{3 3}$

## The SID Method

S stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method


## The SID Method

S stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method

$$
\text { 12. } \stackrel{\sqrt{6}}{\mathbf{6 x}-\mathbf{7}-\mathbf{x}}=\mathbf{3 3}
$$

## The SID Method

S stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method

$$
\text { 12. } \begin{gathered}
\sqrt{6} \mathbf{x}-\mathbf{7}-\mathbf{x} \\
\\
\mathbf{5 x}-\mathbf{7}
\end{gathered}
$$

## The SID Method

S stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method

$$
\text { 12. } \begin{gathered}
\sqrt[\downarrow]{\mathbf{6 x}-7-\mathbf{x}}=\mathbf{3 3} \\
\\
\mathbf{5 x}-\mathbf{7}=
\end{gathered}
$$

## The SID Method

S stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method

$$
\text { 12. } \begin{gathered}
\sqrt[\downarrow]{\mathbf{6 x}-\mathbf{7}-\mathbf{x}}=\mathbf{3 3} \\
\\
\mathbf{5 x}-\mathbf{7}=\mathbf{3 3}
\end{gathered}
$$

## The SID Method

S stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method
12. $\mathbf{6 x}-\mathbf{7}-\mathbf{x}=\mathbf{3 3}$

$$
5 x-7=33
$$

## The SID Method

S stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method
12. $\mathbf{6 x}-7-\mathrm{x}=\mathbf{3 3}$

$$
5 x-7=33
$$

## The SID Method

S stands for Simplify the expression on each side.
I stands for ISOlate the variable.

Algebra I Solving Equations The SID Method

| 12. $\mathbf{6 x}-\mathbf{7}-\mathbf{x}=\mathbf{3 3}$ | Add 7 |
| :---: | :---: |
| $\mathbf{5 x}-\mathbf{7}=\mathbf{3 3}$ | to |
|  | both sides. |

## The SID Method

S stands for Simplify the expression on each side.
I stands for ISOlate the variable.

Algebra I Solving Equations The SID Method
12. $\mathbf{6 x}-\mathbf{7 - x}=\mathbf{3 3}$

$$
\begin{gathered}
5 x-7=33 \\
5 x=
\end{gathered}
$$

## The SID Method

S stands for Simplify the expression on each side.
I stands for ISolate the variable.

Algebra I Solving Equations The SID Method
12. $\mathbf{6 x}-\mathbf{7}-\mathbf{x}=\mathbf{3 3}$

$$
\begin{gathered}
5 x-7=33 \\
5 x=40
\end{gathered}
$$

## The SID Method

S stands for Simplify the expression on each side.
I stands for ISolate the variable.

Algebra I Solving Equations The SID Method
12. $\mathbf{6 x}-\mathbf{7}-\mathbf{x}=\mathbf{3 3}$

$$
\begin{gathered}
5 x-7=33 \\
5 x=40
\end{gathered}
$$

## The SID Method

S stands for Simplify the expression on each side.
I stands for ISOlate the variable.

Algebra I Solving Equations The SID Method
12. $\mathbf{6 x}-\mathbf{7 - x}=\mathbf{3 3}$

$$
\begin{gathered}
5 x-7=33 \\
5 x=40
\end{gathered}
$$

## The SID Method

S stands for Simplify the expression on each side.
I stands for ISolate the variable.
D stands for Divide both sides by the coefficient of $x$.

Algebra I Solving Equations The SID Method
12. $\mathbf{6 x}-\mathbf{7}-\mathbf{x}=\mathbf{3 3}$

$$
\begin{gathered}
5 x-7=33 \\
5 x=40
\end{gathered}
$$

> Divide both sides
> by 5

## The SID Method

$\mathbf{S}$ stands for Simplify the expression on each side.
I stands for ISolate the variable.
D stands for Divide both sides by the coefficient of $x$.

Algebra I Solving Equations The SID Method

$$
\text { 12. } \begin{gathered}
\mathbf{6 x}-\mathbf{7}-\mathrm{x}=\mathbf{3 3} \\
\mathbf{5 x}-\mathbf{7}=\mathbf{3 3} \\
\mathbf{5 x}=\mathbf{4 0} \\
\mathbf{x}=
\end{gathered}
$$

## Divide both sides <br> by 5

## The SID Method

S stands for Simplify the expression on each side.
I stands for ISolate the variable.
D stands for Divide both sides by the coefficient of $\mathbf{x}$.

Algebra I Solving Equations The SID Method
12. $\mathbf{6 x}-7-\mathbf{x}=\mathbf{3 3}$

$$
\begin{gathered}
5 x-7=33 \\
5 x=40 \\
x=8
\end{gathered}
$$

## Divide both sides <br> by 5

## The SID Method

S stands for Simplify the expression on each side.
I stands for ISolate the variable.
D stands for Divide both sides by the coefficient of x .

Algebra I Solving Equations The SID Method
12. $\mathbf{6 x}-\mathbf{7}-\mathbf{x}=\mathbf{3 3}$

$$
\begin{gathered}
5 x-7=33 \\
5 x=40 \\
x=8
\end{gathered}
$$

## The SID Method

S stands for Simplify the expression on each side.
I stands for ISolate the variable.
D stands for Divide both sides by the coefficient of $\mathbf{x}$.

Algebra I Solving Equations The SID Method
13. $\mathbf{3 x}+2(x+5)=45$

## The SID Method

Algebra I Solving Equations The SID Method

$$
\text { 13. } 3 x+2(x+5)=45
$$

## The SID Method

S stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method

$$
\text { 13. } 3 x+2(x+5)=45
$$

## The SID Method

S stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method

$$
\text { 13. } 3 x+2(x+5)=45
$$

$$
\mathbf{3 x}+
$$

## The SID Method

$\mathbf{S}$ stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method

$$
\begin{aligned}
& \text { 13. } \quad 3 x+2(x+5)=45 \\
& 3 x+2 x
\end{aligned}
$$

## The SID Method

$\mathbf{S}$ stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method

$$
\text { 13. } \begin{aligned}
& \mathbf{3 x}+2(x+5)=45 \\
& 3 x+2 x+10
\end{aligned}
$$

## The SID Method

S stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method

$$
\text { 13. } \begin{array}{ll}
\mathbf{3 x}+2(x+5)=45 \\
& 3 x+2 x+10=
\end{array}
$$

## The SID Method

$\mathbf{S}$ stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method

$$
\text { 13. } \begin{aligned}
& \mathbf{3 x}+2(x+5)=45 \\
& 3 x+2 x+10=45
\end{aligned}
$$

## The SID Method

$\mathbf{S}$ stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method

$$
\text { 13. } \begin{aligned}
& \mathbf{3 x}+2(x+5)=45 \\
& 3 x+2 x+10=45
\end{aligned}
$$

## The SID Method

$\mathbf{S}$ stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method
13. $\mathbf{3 x}+2(x+5)=45$

$$
3 x+2 x+10=45
$$

## The SID Method

$\mathbf{S}$ stands for Simplify the expression on each side.

## Algebra I Solving Equations The SID Method

13. $\mathbf{3 x}+2(x+5)=45$
$3 \mathrm{x}+2 \mathrm{x}+10=45$
5x

## The SID Method

$\mathbf{S}$ stands for Simplify the expression on each side.

## Algebra I Solving Equations The SID Method

13. $\mathbf{3 x}+2(x+5)=45$

$$
3 x+2 x+10=45
$$

$$
5 x+10
$$

## The SID Method

$\mathbf{S}$ stands for Simplify the expression on each side.

## Algebra I Solving Equations The SID Method

13. $\mathbf{3 x}+2(x+5)=45$

$$
3 x+2 x+10=45
$$

$$
5 x+10=
$$

## The SID Method

S stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method
13. $\mathbf{3 x}+2(x+5)=45$

$$
3 x+2 x+10=45
$$

$$
5 x+10=45
$$

## The SID Method

$\mathbf{S}$ stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method
13. $\mathbf{3 x}+2(x+5)=45$

$$
\begin{gathered}
3 x+2 x+10=45 \\
5 x+10=45
\end{gathered}
$$

## The SID Method

$\mathbf{S}$ stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method
13. $3 x+2(x+5)=45$

$$
\begin{gathered}
3 x+2 x+10=45 \\
5 x+10=45
\end{gathered}
$$

## The SID Method

S stands for Simplify the expression on each side.
I stands for ISolate the variable.

Algebra I Solving Equations The SID Method
13. $3 x+2(x+5)=45$

$$
\begin{gathered}
3 x+2 x+10=45 \\
5 x+10=45
\end{gathered}
$$

# Subtract 10 <br> from <br> both sides. 

## The SID Method

$\mathbf{S}$ stands for Simplify the expression on each side.
I stands for ISolate the variable.

Algebra I Solving Equations The SID Method

$$
\text { 13. } \begin{gathered}
3 x+2(x+5)=45 \\
3 x+2 x+10=45 \\
5 x+10=45 \\
5 x=
\end{gathered}
$$

## The SID Method

$\mathbf{S}$ stands for Simplify the expression on each side.
I stands for ISOlate the variable.

Algebra I Solving Equations The SID Method

$$
\text { 13. } \begin{gathered}
\mathbf{3 x}+\mathbf{2}(\mathrm{x}+\mathbf{5})=\mathbf{4 5} \\
\mathbf{3 x}+\mathbf{2 x}+\mathbf{1 0}=\mathbf{4 5} \\
\mathbf{5 x}+\mathbf{1 0}=\mathbf{4 5} \\
\mathbf{5 x}=\mathbf{3 5}
\end{gathered}
$$

Subtract 10
from
both sides.

## The SID Method

S stands for Simplify the expression on each side.
I stands for ISolate the variable.

Algebra I Solving Equations The SID Method
13. $\mathbf{3 x}+2(x+5)=45$

$$
3 x+2 x+10=45
$$

$$
5 x+10=45
$$

$$
5 x=35
$$

## The SID Method

S stands for Simplify the expression on each side.
I stands for ISolate the variable.

Algebra I Solving Equations The SID Method
13. $3 x+2(x+5)=45$

$$
\begin{gathered}
3 x+2 x+10=45 \\
5 x+10=45 \\
5 x=35
\end{gathered}
$$

## The SID Method

S stands for Simplify the expression on each side.
I stands for ISolate the variable.
D stands for Divide both sides by the coefficient of $\mathbf{x}$.

Algebra I Solving Equations The SID Method

$$
\text { 13. } \begin{gathered}
3 x+2(x+5)=45 \\
3 x+2 x+10=45 \\
5 x+10=45 \\
5 x=35
\end{gathered}
$$

Divide
both sides

$$
\text { by } 5
$$

## The SID Method

S stands for Simplify the expression on each side.
I stands for ISOlate the variable.
D stands for Divide both sides by the coefficient of $x$.

Algebra I Solving Equations The SID Method

$$
\text { 13. } \begin{gathered}
\mathbf{3 x}+2(x+5)=45 \\
\mathbf{3 x}+2 x+10=\mathbf{4 5} \\
\mathbf{5 x}+\mathbf{1 0}=\mathbf{4 5} \\
\mathbf{5 x}=\mathbf{3 5} \\
\mathbf{x}=
\end{gathered}
$$

Divide
both sides

$$
\text { by } 5
$$

## The SID Method

$\mathbf{S}$ stands for Simplify the expression on each side.
I stands for ISolate the variable.
D stands for Divide both sides by the coefficient of $\mathbf{x}$.

Algebra I Solving Equations The SID Method

$$
\text { 13. } \begin{gathered}
\mathbf{3 x}+\mathbf{2}(\mathrm{x}+\mathbf{5})=\mathbf{4 5} \\
\mathbf{3 x}+\mathbf{2 x}+\mathbf{1 0}=\mathbf{4 5} \\
\mathbf{5 x}+\mathbf{1 0}=\mathbf{4 5} \\
\mathbf{5 x}=\mathbf{3 5} \\
\mathbf{x}=\mathbf{7}
\end{gathered}
$$

Divide
both sides

$$
\text { by } 5
$$

## The SID Method

$\mathbf{S}$ stands for Simplify the expression on each side.
I stands for ISolate the variable.
D stands for Divide both sides by the coefficient of $x$.

Algebra I Solving Equations The SID Method
13. $3 x+2(x+5)=45$

$$
\begin{gathered}
3 x+2 x+10=45 \\
5 x+10=45 \\
5 x=35 \\
x=7
\end{gathered}
$$

## The SID Method

$\mathbf{S}$ stands for Simplify the expression on each side.
I stands for ISolate the variable.
D stands for Divide both sides by the coefficient of $\mathbf{x}$.

Algebra I Solving Equations The SID Method
14. $\mathbf{2 x}+\mathbf{3}(\mathbf{x}-\mathbf{2})=\mathbf{3 9}$

## The SID Method

Algebra I Solving Equations The SID Method
14. $\mathbf{2 x}+\mathbf{3}(\mathbf{x}-\mathbf{2})=\mathbf{3 9}$

## The SID Method

$\mathbf{S}$ stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method

$$
\text { 14. } 2 x+3(x-2)=39
$$

## The SID Method

$\mathbf{S}$ stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method

$$
\text { 14. } 2 x+3(x-2)=39
$$

$$
2 \mathbf{x}+
$$

## The SID Method

$\mathbf{S}$ stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method

$$
\text { 14. } 2 x+3(x-2)=39
$$

$$
2 x+3 x
$$

## The SID Method

$\mathbf{S}$ stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method

$$
\text { 14. } \begin{array}{ll} 
& 2 x+3(x-2)=39 \\
& 2 x+3 x-6
\end{array}
$$

## The SID Method

$\mathbf{S}$ stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method

$$
\text { 14. } \begin{array}{ll}
2 x+3(x-2)=39 \\
& 2 x+3 x-6=
\end{array}
$$

## The SID Method

$\mathbf{S}$ stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method

$$
\begin{array}{ll}
\text { 14. } & 2 x+3(x-2)=39 \\
& 2 x+3 x-6=39
\end{array}
$$

## The SID Method

$\mathbf{S}$ stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method

$$
\begin{array}{ll}
\text { 14. } & 2 x+3(x-2)=39 \\
& 2 x+3 x-6=39
\end{array}
$$

## The SID Method

$\mathbf{S}$ stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method

$$
\text { 14. } 2 x+3(x-2)=39
$$

$$
2 x+3 x-6=39
$$

## The SID Method

S stands for Simplify the expression on each side.

## Algebra I Solving Equations The SID Method

14. $2 x+3(x-2)=39$

$$
2 x+3 x-6=39
$$

## 5x

## The SID Method

S stands for Simplify the expression on each side.

## Algebra I Solving Equations The SID Method

$$
\text { 14. } \begin{gathered}
2 x+3(x-2)=39 \\
2 x+3 x-6=39 \\
5 x-6
\end{gathered}
$$

## The SID Method

$\mathbf{S}$ stands for Simplify the expression on each side.

## Algebra I Solving Equations The SID Method

14. $\mathbf{2 x}+\mathbf{3}(\mathbf{x}-\mathbf{2})=\mathbf{3 9}$

$$
2 x+3 x-6=39
$$

$$
5 x-6=
$$

## The SID Method

$\mathbf{S}$ stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method

$$
\text { 14. } \begin{gathered}
2 x+3(x-2)=39 \\
2 x+3 x-6=39 \\
5 x-6=39
\end{gathered}
$$

## The SID Method

$\mathbf{S}$ stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method

$$
\text { 14. } \begin{gathered}
2 x+3(x-2)=39 \\
2 x+3 x-6=39 \\
5 x-6=39
\end{gathered}
$$

## The SID Method

$\mathbf{S}$ stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method

$$
\text { 14. } \begin{gathered}
\mathbf{2 x}+\mathbf{3}(\mathrm{x}-\mathbf{2})=\mathbf{3 9} \\
\mathbf{2 x}+\mathbf{3 x}-\mathbf{6}=\mathbf{3 9} \\
\mathbf{5 x}-\mathbf{6}=\mathbf{3 9}
\end{gathered}
$$

## The SID Method

S stands for Simplify the expression on each side.
I stands for ISolate the variable.

Algebra I Solving Equations The SID Method

$$
\text { 14. } \quad \begin{gathered}
\mathbf{x}+3(\mathrm{x}-\mathbf{2})=\mathbf{3 9} \\
\mathbf{2 x}+\mathbf{3 x}-\mathbf{6}=\mathbf{3 9} \\
\mathbf{5 x}-\mathbf{6}=\mathbf{3 9}
\end{gathered}
$$

$\square$
Add 6 to both sides.

## The SID Method

S stands for Simplify the expression on each side.
I stands for ISolate the variable.

Algebra I Solving Equations The SID Method

$$
\text { 14. } \begin{gathered}
2 x+3(x-2)=39 \\
2 x+3 x-6=39 \\
5 x-6=39 \\
5 x=
\end{gathered}
$$

# Add 6 to both sides. 

## The SID Method

S stands for Simplify the expression on each side.
I stands for ISolate the variable.

Algebra I Solving Equations The SID Method

$$
\text { 14. } \begin{gathered}
2 x+3(x-2)=39 \\
2 x+3 x-6=39 \\
5 x-6=39 \\
5 x=45
\end{gathered}
$$

$\square$
Add 6 to both sides.

## The SID Method

$\mathbf{S}$ stands for Simplify the expression on each side.
I stands for ISolate the variable.

Algebra I Solving Equations The SID Method

$$
\text { 14. } \begin{gathered}
2 x+3(x-2)=39 \\
2 x+3 x-6=39 \\
5 x-6=39 \\
5 x=45
\end{gathered}
$$

## The SID Method

S stands for Simplify the expression on each side.
I stands for ISolate the variable.

Algebra I Solving Equations The SID Method

$$
\text { 14. } \begin{gathered}
2 x+3(x-2)=39 \\
2 x+3 x-6=39 \\
5 x-6=39 \\
5 x=45
\end{gathered}
$$

## The SID Method

$\mathbf{S}$ stands for Simplify the expression on each side.
I stands for ISOlate the variable.
D stands for Divide both sides by the coefficient of $x$.

Algebra I Solving Equations The SID Method

$$
\text { 14. } \begin{gathered}
2 x+3(x-2)=39 \\
2 x+3 x-6=39 \\
5 x-6=39 \\
5 x=45
\end{gathered}
$$

Divide both sides
by 5

## The SID Method

S stands for Simplify the expression on each side.
I stands for ISolate the variable.
D stands for Divide both sides by the coefficient of $x$.

## Algebra I Solving Equations The SID Method

$$
\text { 14. } \begin{gathered}
2 x+3(x-2)=39 \\
2 x+3 x-6=39 \\
5 x-6=39 \\
5 x=45 \\
x=
\end{gathered}
$$

## The SID Method

S stands for Simplify the expression on each side.
I stands for ISolate the variable.
D stands for Divide both sides by the coefficient of x .

Algebra I Solving Equations The SID Method

$$
\text { 14. } \begin{gathered}
\mathbf{2 x}+3(\mathrm{x}-2)=\mathbf{3 9} \\
\mathbf{2 x}+\mathbf{3 x}-\mathbf{6}=\mathbf{3 9} \\
\mathbf{5 x}-\mathbf{6}=\mathbf{3 9} \\
\mathbf{5 x}=\mathbf{4 5} \\
\mathbf{x}=\mathbf{9}
\end{gathered}
$$

## Divide both sides <br> by 5

## The SID Method

S stands for Simplify the expression on each side.
I stands for ISolate the variable.
D stands for Divide both sides by the coefficient of $x$.

Algebra I Solving Equations The SID Method

$$
\text { 14. } \begin{gathered}
2 x+3(x-2)=39 \\
2 x+3 x-6=39 \\
5 x-6=39 \\
5 x=45 \\
x=9
\end{gathered}
$$

## The SID Method

S stands for Simplify the expression on each side.
I stands for ISolate the variable.
D stands for Divide both sides by the coefficient of $x$.

Algebra I Solving Equations The SID Method
15. $\mathbf{x}+4(\mathrm{x}+2)=\mathbf{3}(\mathrm{x}+\mathbf{6})$

## The SID Method

Algebra I Solving Equations The SID Method
15. $\mathbf{x}+4(\mathrm{x}+2)=3(\mathrm{x}+6)$

## The SID Method

S stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method

$$
\text { 15. } x+4(x+2)=3(x+6)
$$

## The SID Method

S stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method

$$
\begin{array}{ll}
\text { 15. } & x+4(x+2)=3(x+6) \\
x+
\end{array}
$$

## The SID Method

S stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method

$$
\text { 15. } \begin{array}{ll} 
& x+4(x+2)=3(x+6) \\
& x+4 x
\end{array}
$$

## The SID Method

S stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method

$$
\text { 15. } \begin{array}{ll} 
& x+4(x+2)=3(x+6) \\
& x+4 x+8
\end{array}
$$

## The SID Method

S stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method

$$
\begin{array}{ll}
\text { 15. } & x+4(x+2)=3(x+6) \\
& x+4 x+8=
\end{array}
$$

## The SID Method

$\mathbf{S}$ stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method

$$
\text { 15. } \begin{array}{ll} 
& x+4(x+2)=3(x+6) \\
& x+4 x+8=
\end{array}
$$

## The SID Method

S stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method

$$
\text { 15. } \begin{array}{ll}
x+4(x+2)=3(x+6) \\
& x+4 x+8=3 x
\end{array}
$$

## The SID Method

S stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method

$$
\begin{array}{ll}
\text { 15. } & x+4(x+2)=3(x+6) \\
& x+4 x+8=3 x+18
\end{array}
$$

## The SID Method

S stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method

$$
\text { 15. } \begin{array}{ll} 
& x+4(x+2)=3(x+6) \\
& x+4 x+8=3 x+18
\end{array}
$$

## The SID Method

S stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method

$$
\begin{array}{ll}
\text { 15. } & x+4(x+2)=3(x+6) \\
x+4 x+8=3 x+18
\end{array}
$$

## The SID Method

$\mathbf{S}$ stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method

$$
\begin{aligned}
& \text { 15. } \quad \mathrm{x}+4(\mathrm{x}+\mathbf{2})=\mathbf{3}(\mathrm{x}+\mathbf{6}) \\
& \mathrm{x}+\mathbf{4 x}+\mathbf{8}=\mathbf{3 x}+\mathbf{1 8} \\
& \mathbf{5 x}
\end{aligned}
$$

## The SID Method

$\mathbf{S}$ stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method

$$
\begin{aligned}
& \text { 15. } \quad x+4(x+2)=3(x+6) \\
& x+4 x+8=3 x+18 \\
& 5 x+8
\end{aligned}
$$

## The SID Method

$\mathbf{S}$ stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method

$$
\begin{aligned}
& \text { 15. } \quad x+4(x+2)=3(x+6) \\
& x+4 x+8=3 x+18 \\
& 5 x+8=
\end{aligned}
$$

## The SID Method

S stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method

$$
\begin{aligned}
& \text { 15. } \quad \mathrm{x}+4(\mathrm{x}+\mathbf{2})=\mathbf{3}(\mathrm{x}+\mathbf{6}) \\
& \mathrm{x}+\mathbf{4 x}+\mathbf{8}=\mathbf{3 x}+\mathbf{1 8} \\
& \mathbf{5 x}+\mathbf{8}=\mathbf{3 x}
\end{aligned}
$$

## The SID Method

S stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method

$$
\text { 15. } \begin{gathered}
x+4(x+2)=3(x+6) \\
x+4 x+8=3 x+18 \\
5 x+8=3 x+18
\end{gathered}
$$

## The SID Method

S stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method

$$
\text { 15. } \begin{gathered}
x+4(x+2)=3(x+6) \\
x+4 x+8=3 x+18 \\
5 x+8=3 x+18
\end{gathered}
$$

## The SID Method

S stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method

$$
\text { 15. } \begin{gathered}
x+4(x+2)=3(x+6) \\
x+4 x+8=3 x+18 \\
5 x+8=3 x+18
\end{gathered}
$$

## The SID Method

$\mathbf{S}_{\text {stands for }}$ Simplify the expression on each side.
I stands for Isolate the variable.

Algebra I Solving Equations The SID Method

$$
\text { 15. } \begin{array}{cc}
\mathrm{x}+4(\mathrm{x}+2)=3(\mathrm{x}+\mathbf{6}) & \\
\mathrm{x}+4 \mathrm{x}+8=3 \mathrm{x}+\mathbf{1 8} & \text { Subtract } 3 \mathrm{x} \\
\mathbf{5 x}+\mathbf{8}=\mathbf{3 x}+\mathbf{1 8} & \text { from } \\
& \text { both sides. }
\end{array}
$$

## The SID Method

S stands for Simplify the expression on each side.
I stands for ISolate the variable.

Algebra I Solving Equations The SID Method

$$
\text { 15. } \begin{array}{cc}
\mathrm{x}+4(\mathrm{x}+\mathbf{2})=\mathbf{3}(\mathrm{x}+\mathbf{6}) & \\
\mathrm{x}+4 \mathrm{x}+\mathbf{8}=\mathbf{3 x}+\mathbf{1 8} & \text { Subtract } \mathbf{3 x} \\
\mathbf{5 x}+\mathbf{8}=\mathbf{3 x}+\mathbf{1 8} & \text { from } \\
& \text { both sides. }
\end{array}
$$

## The SID Method

S stands for Simplify the expression on each side.
I stands for ISolate the variable.

Algebra I Solving Equations The SID Method

$$
\text { 15. } \begin{array}{cc}
\mathrm{x}+4(\mathrm{x}+2)=3(\mathrm{x}+\mathbf{6}) & \\
\mathrm{x}+4 \mathrm{x}+8=3 \mathrm{x}+18 & \text { Subtract } 3 \mathrm{x} \\
\mathbf{5 x}+8=3 \mathrm{x}+18 & \text { from } \\
2 \mathrm{x}+8= & \text { both sides. }
\end{array}
$$

## The SID Method

S stands for Simplify the expression on each side.
I stands for ISolate the variable.

Algebra I Solving Equations The SID Method

$$
\text { 15. } \begin{gathered}
\mathrm{x}+4(\mathrm{x}+2)=\mathbf{3}(\mathrm{x}+\mathbf{6}) \\
\mathrm{x}+4 \mathrm{x}+\mathbf{8}=\mathbf{3 x}+\mathbf{1 8} \\
\mathbf{5 x}+\mathbf{8}=\mathbf{3 x}+\mathbf{1 8} \\
\mathbf{2 x}+\mathbf{8}=\mathbf{1 8}
\end{gathered}
$$

## The SID Method

$\mathbf{S}_{\text {stands for }}$ Simplify the expression on each side.
I stands for Isolate the variable.

Algebra I Solving Equations The SID Method

$$
\text { 15. } \begin{gathered}
\mathrm{x}+4(\mathrm{x}+2)=\mathbf{3}(\mathrm{x}+\mathbf{6}) \\
\mathrm{x}+4 \mathrm{x}+\mathbf{8}=\mathbf{3 x}+\mathbf{1 8} \\
\mathbf{5 x}+\mathbf{8}=\mathbf{3 x}+\mathbf{1 8} \\
\mathbf{2 x}+\mathbf{8}=\mathbf{1 8}
\end{gathered}
$$

## The SID Method

S stands for Simplify the expression on each side.
I stands for ISolate the variable.

Algebra I Solving Equations The SID Method

$$
\text { 15. } \begin{gathered}
\mathrm{x}+4(\mathrm{x}+2)=\mathbf{3}(\mathrm{x}+\mathbf{6}) \\
\mathrm{x}+4 \mathrm{x}+8=\mathbf{3 x}+\mathbf{1 8} \\
\mathbf{5 x}+\mathbf{8}=\mathbf{3 x}+\mathbf{1 8} \\
\mathbf{2 x}+\mathbf{8}=\mathbf{1 8}
\end{gathered}
$$

## The SID Method

S stands for Simplify the expression on each side.
I stands for ISOlate the variable.

Algebra I Solving Equations The SID Method

$$
\text { 15. } \begin{array}{cc}
\mathrm{x}+4(\mathrm{x}+2)=\mathbf{3}(\mathrm{x}+6) & \\
\mathrm{x}+4 \mathrm{x}+8=3 \mathrm{x}+\mathbf{1 8} & \text { Subtract } 8 \\
\mathbf{5 x}+8=\mathbf{8 x}+\mathbf{1 8} & \text { from } \\
\mathbf{2 x}+\mathbf{8}=\mathbf{1 8} & \\
\mathbf{2 x}= &
\end{array}
$$

## The SID Method

S stands for Simplify the expression on each side.
I stands for ISolate the variable.

Algebra I Solving Equations The SID Method

$$
\begin{aligned}
& \text { 15. } \mathbf{x}+4(x+2)=3(x+6) \\
& x+4 x+8=3 x+18 \\
& 5 \mathrm{x}+8=3 \mathrm{x}+18 \\
& 2 \mathrm{x}+8=18 \\
& 2 \mathrm{x}=10 \\
& \text { Subtract } 8 \\
& \text { from } \\
& \text { both sides. }
\end{aligned}
$$

## The SID Method

S stands for Simplify the expression on each side.
I stands for ISolate the variable.

Algebra I Solving Equations The SID Method

$$
\text { 15. } \begin{gathered}
\mathrm{x}+4(\mathrm{x}+\mathbf{2})=\mathbf{3}(\mathrm{x}+\mathbf{6}) \\
\mathrm{x}+\mathbf{4 x}+\mathbf{8}=\mathbf{3 x}+\mathbf{1 8} \\
\mathbf{5 x}+\mathbf{8}=\mathbf{3 x}+\mathbf{1 8} \\
\mathbf{2 x}+\mathbf{8}=\mathbf{1 8} \\
\mathbf{2 x}=\mathbf{1 0}
\end{gathered}
$$

## The SID Method

$\mathbf{S}_{\text {stands for }}$ Simplify the expression on each side.
I stands for Isolate the variable.

Algebra I Solving Equations The SID Method

$$
\text { 15. } \begin{gathered}
\mathrm{x}+4(\mathrm{x}+\mathbf{2})=\mathbf{3}(\mathrm{x}+\mathbf{6}) \\
\mathrm{x}+4 \mathrm{x}+\mathbf{8}=\mathbf{3 x}+\mathbf{1 8} \\
\mathbf{5 x}+\mathbf{8}=\mathbf{3 x}+\mathbf{1 8} \\
\mathbf{2 x}+\mathbf{8}=\mathbf{1 8} \\
\mathbf{2 x}=\mathbf{1 0}
\end{gathered}
$$

## The SID Method

S stands for Simplify the expression on each side.
I stands for ISolate the variable.
D stands for Divide both sides by the coefficient of $\mathbf{x}$.

Algebra I Solving Equations The SID Method

$$
\text { 15. } \begin{array}{cc}
\mathrm{x}+4(\mathrm{x}+2)=\mathbf{3}(\mathrm{x}+6) & \\
\mathrm{x}+4 \mathrm{x}+8=3 \mathrm{x}+\mathbf{1 8} & \text { Divide } \\
\mathbf{5 x}+8=3 \mathrm{x}+\mathbf{1 8} & \text { both sides } \\
\mathbf{2 x}+8=\mathbf{1 8} & \text { by } 2 \\
\mathbf{2 x}=\mathbf{1 0} & \\
\hline
\end{array}
$$

## The SID Method

S stands for Simplify the expression on each side.
I stands for ISolate the variable.
D stands for Divide both sides by the coefficient of $\mathbf{x}$.

Algebra I Solving Equations The SID Method

$$
\text { 15. } \begin{gathered}
\mathrm{x}+4(\mathrm{x}+\mathbf{2})=\mathbf{3}(\mathrm{x}+\mathbf{6}) \\
\mathrm{x}+4 \mathrm{x}+\mathbf{8}=\mathbf{3 x}+\mathbf{1 8} \\
\mathbf{5 x}+\mathbf{8}=\mathbf{3 x}+\mathbf{1 8} \\
\mathbf{2 x}+\mathbf{8}=\mathbf{1 8} \\
\mathbf{2 x}=\mathbf{1 0} \\
\mathbf{x}=
\end{gathered}
$$

Algebra I Solving Equations The SID Method

$$
\text { 15. } \begin{array}{cc}
\mathrm{x}+4(\mathrm{x}+2)=3(\mathrm{x}+6) & \\
\mathrm{x}+4 \mathrm{x}+8=3 \mathrm{x}+18 & \text { Divide } \\
\mathbf{5 x}+8=3 \mathrm{x}+18 & \text { both sides } \\
\mathbf{2 x}+\mathbf{8}=\mathbf{1 8} & \text { by } 2 \\
\mathbf{2 x}=\mathbf{1 0} & \\
\mathrm{x}=\mathbf{5} &
\end{array}
$$

## The SID Method

$\mathbf{S}$ stands for Simplify the expression on each side.
I stands for ISolate the variable.
D stands for Divide both sides by the coefficient of $\mathbf{x}$.

Algebra I Solving Equations The SID Method

$$
\text { 15. } \mathbf{x}+4(\mathrm{x}+2)=\mathbf{3}(\mathrm{x}+\mathbf{6}) \mathrm{x}
$$

## The SID Method

$\mathbf{S}$ stands for Simplify the expression on each side.
I stands for ISolate the variable.
D stands for Divide both sides by the coefficient of x .

Algebra I Solving Equations The SID Method

$$
\text { 16. } 4(x+2)+3(2 x+5)=3 x+5(x+7)
$$

Algebra I Solving Equations The SID Method
16. $4(x+2)+3(2 x+5)=3 x+5(x+7)$

## The SID Method

S stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method
16. $4(x+2)+3(2 x+5)=3 x+5(x+7)$

## The SID Method

S stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method

$$
\text { 16. } \frac{4(x+2)}{4 x}+3(2 x+5)=3 x+5(x+7)
$$

## The SID Method

S stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method

$$
\text { 16. } \frac{4(x+2)+3(2 x+5)=3 x+5(x+7)}{4 x+8}
$$

## The SID Method

S stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method

$$
\begin{aligned}
& \text { 16. } 4(x+2)+3(2 x+5)=3 x+5(x+7) \\
& 4 x+8
\end{aligned}
$$

## The SID Method

S stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method

$$
\text { 16. } \begin{gathered}
4(x+2)+3(2 x+5)=3 x+5(x+7) \\
4 x+8+6 x
\end{gathered}
$$

## The SID Method

S stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method

$$
\text { 16. } 4(x+2)+3(2 x+5)=3 x+5(x+7)
$$

## The SID Method

S stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method

$$
\text { 16. } \begin{aligned}
4(x+2)+3(2 x+5) & =3 x+5(x+7) \\
4 x+8+6 x+15 & =
\end{aligned}
$$

## The SID Method

S stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method

$$
\text { 16. } \begin{aligned}
4(x+2)+3(2 x+5) & =3 x+5(x+7) \\
4 x+8+6 x+15 & =3 x
\end{aligned}
$$

## The SID Method

S stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method

$$
\text { 16. } \begin{aligned}
4(x+2)+3(2 x+5) & =3 x+5(x+7) \\
4 x+8+6 x+15 & =3 x
\end{aligned}
$$

## The SID Method

$\mathbf{S}$ stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method

$$
\text { 16. } \begin{aligned}
4(x+2)+3(2 x+5) & =3 x+5(x+7) \\
4 x+8+6 x+15 & =3 x+5 x
\end{aligned}
$$

## The SID Method

S stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method

$$
\text { 16. } \begin{aligned}
4(x+2)+3(2 x+5) & =3 x+5(x+7) \\
4 x+8+6 x+15 & =3 x+5 x+35
\end{aligned}
$$

## The SID Method

S stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method

$$
\text { 16. } \begin{aligned}
4(x+2)+3(2 x+5) & =3 x+5(x+7) \\
4 x+8+6 x+15 & =3 x+5 x+35
\end{aligned}
$$

## The SID Method

S stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method

$$
\text { 16. } \begin{aligned}
4(x+2)+3(2 x+5) & =3 x+5(x+7) \\
4 x+8+6 x+15 & =3 x+5 x+35
\end{aligned}
$$

## The SID Method

$\mathbf{S}$ stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method

$$
\text { 16. } \begin{aligned}
4(x+2)+3(2 x+5) & =3 x+5(x+7) \\
4 x+8+6 x+15 & =3 x+5 x+35
\end{aligned}
$$

10x

## The SID Method

S stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method

$$
\text { 16. } \begin{aligned}
4(x+2)+3(2 x+5) & =3 x+5(x+7) \\
4 x+8+6 x+15 & =3 x+5 x+35
\end{aligned}
$$

10x

## The SID Method

$\mathbf{S}$ stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method

$$
\begin{aligned}
& \text { 16. } 4(x+2)+3(2 x+5)=3 x+5(x+7) \\
& 4 x+8+6 x+15=3 x+5 x+35
\end{aligned}
$$

## The SID Method

S stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method

$$
\text { 16. } \begin{aligned}
& 4(x+2)+3(2 x+5)=3 x+5(x+7) \\
& 4 x+8+6 x+15=3 x+5 x+35 \\
& \mathbf{1 0 x}+\mathbf{2 3}
\end{aligned}
$$

## The SID Method

S stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method

$$
\text { 16. } \begin{aligned}
4(x+2)+3(2 x+5) & =3 x+5(x+7) \\
4 x+8+6 x+15 & =3 x+5 x+35 \\
10 x+23 & =
\end{aligned}
$$

## The SID Method

S stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method

$$
\text { 16. } \begin{aligned}
4(x+2)+3(2 x+5) & =3 x+5(x+7) \\
4 x+8+6 x+15 & =3 x+5 x+35 \\
10 x+23 & =
\end{aligned}
$$

## The SID Method

S stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method

$$
\text { 16. } \begin{aligned}
4(x+2)+3(2 x+5) & =3 x+5(x+7) \\
4 x+8+6 x+15 & =3 x+5 x+35 \\
10 x+23 & =8 x
\end{aligned}
$$

## The SID Method

$\mathbf{S}$ stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method

$$
\text { 16. } \begin{aligned}
4(x+2)+3(2 x+5) & =3 x+5(x+7) \\
4 x+8+6 x+15 & =3 x+5 x+35 \\
10 x+23 & =8 x
\end{aligned}
$$

## The SID Method

S stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method

$$
\text { 16. } \begin{aligned}
4(x+2)+3(2 x+5) & =3 x+5(x+7) \\
4 x+8+6 x+15 & =3 x+5 x+35 \\
10 x+23 & =8 x+35
\end{aligned}
$$

## The SID Method

S stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method

$$
\text { 16. } \begin{aligned}
4(x+2)+3(2 x+5) & =3 x+5(x+7) \\
4 x+8+6 x+15 & =3 x+5 x+35 \\
10 x+23 & =8 x+35
\end{aligned}
$$

## The SID Method

S stands for Simplify the expression on each side.
I stands for ISOlate the variable.

Algebra I Solving Equations The SID Method

$$
\text { 16. } \begin{aligned}
4(x+2)+3(2 x+5) & =3 x+5(x+7) \\
4 x+8+6 x+15 & =3 x+5 x+35 \\
10 x+23 & =8 x+35
\end{aligned}
$$

# Subtract 8x from both sides. 

## The SID Method

S stands for Simplify the expression on each side.
I stands for ISolate the variable.

Algebra I Solving Equations The SID Method
16. $4(x+2)+3(2 x+5)=3 x+5(x+7)$

$$
\begin{gathered}
4 x+8+6 x+15=3 x+5 x+35 \\
10 x+23=8 x+35
\end{gathered}
$$

Subtract 8x from both sides.

## The SID Method

$\mathbf{S}$ stands for Simplify the expression on each side.
I stands for ISOlate the variable.

Algebra I Solving Equations The SID Method

$$
\text { 16. } \begin{aligned}
& 4(x+2)+3(2 x+5)=3 x+5(x+7) \\
& 4 x+8+6 x+15=3 x+5 x+35 \\
& 10 x+23=8 x+35 \\
& 2 x+23
\end{aligned}
$$

## The SID Method

S stands for Simplify the expression on each side.
I stands for ISOlate the variable.

Algebra I Solving Equations The SID Method

$$
\text { 16. } \begin{aligned}
4(x+2)+3(2 x+5) & =3 x+5(x+7) \\
4 x+8+6 x+15 & =3 x+5 x+35 \\
10 x+23 & =8 x+35 \\
2 x+23 & =35
\end{aligned}
$$

# Subtract 8x from both sides. 

## The SID Method

S stands for Simplify the expression on each side.
I stands for ISolate the variable.

Algebra I Solving Equations The SID Method
16. $4(x+2)+3(2 x+5)=3 x+5(x+7)$

$$
\begin{aligned}
4 x+8+6 x+15 & =3 x+5 x+35 \\
10 x+23 & =8 x+35 \\
2 x+23 & =35
\end{aligned}
$$

## The SID Method

S stands for Simplify the expression on each side.
I stands for ISolate the variable.

Algebra I Solving Equations The SID Method

$$
\text { 16. } \begin{aligned}
4(x+2)+3(2 x+5) & =3 x+5(x+7) \\
4 x+8+6 x+15 & =3 x+5 x+35 \\
10 x+23 & =8 x+35 \\
2 x+23 & =35
\end{aligned}
$$

## The SID Method

S stands for Simplify the expression on each side.
I stands for ISOlate the variable.

Algebra I Solving Equations The SID Method

$$
\text { 16. } \begin{aligned}
4(x+2)+3(2 x+5) & =3 x+5(x+7) \\
4 x+8+6 x+15 & =3 x+5 x+35 \\
10 x+23 & =8 x+35 \\
2 x+23 & =35 \\
2 x & =
\end{aligned}
$$

Subtract 23
from
both sides.

## The SID Method

S stands for Simplify the expression on each side.
I stands for Isolate the variable.

Algebra I Solving Equations The SID Method

$$
\text { 16. } \begin{aligned}
4(x+2)+3(2 x+5) & =3 x+5(x+7) \\
4 x+8+6 x+15 & =3 x+5 x+35 \\
10 x+23 & =8 x+35 \\
2 x+23 & =35 \\
2 x & =12
\end{aligned}
$$

## The SID Method

S stands for Simplify the expression on each side.
I stands for ISolate the variable.

Algebra I Solving Equations The SID Method

$$
\text { 16. } \begin{aligned}
4(x+2)+3(2 x+5) & =3 x+5(x+7) \\
4 x+8+6 x+15 & =3 x+5 x+35 \\
10 x+23 & =8 x+35 \\
2 x+23 & =35 \\
2 x & =12
\end{aligned}
$$

## The SID Method

S stands for Simplify the expression on each side.
I stand for Isolate the variable.

Algebra I Solving Equations The SID Method
16. $4(x+2)+3(2 x+5)=3 x+5(x+7)$

$$
\begin{gathered}
4 x+8+6 x+15=3 x+5 x+35 \\
10 x+23=8 x+35 \\
2 x+23=35 \\
2 x=12
\end{gathered}
$$

## The SID Method

S stands for Simplify the expression on each side.
I stands for ISolate the variable.
D stands for Divide both sides by the coefficient of $\mathbf{x}$.

Algebra I Solving Equations The SID Method

$$
\text { 16. } \begin{aligned}
4(x+2)+3(2 x+5) & =3 x+5(x+7) \\
4 x+8+6 x+15 & =3 x+5 x+35 \\
10 x+23 & =8 x+35 \\
2 x+23 & =35 \\
2 x & =12
\end{aligned}
$$

## The SID Method

$\mathbf{S}$ stands for Simplify the expression on each side.
I stands for ISolate the variable.
D stands for Divide both sides by the coefficient of $\mathbf{x}$.

Algebra I Solving Equations The SID Method

$$
\text { 16. } \begin{array}{r}
4(x+2)+3(2 x+5)=3 x+5(x+7) \\
4 x+8+6 x+15=3 x+5 x+35 \\
10 x+23=8 x+35 \\
2 x+23=35 \\
2 x=12 \\
x=
\end{array}
$$

## The SID Method

$\mathbf{S}$ stands for Simplify the expression on each side.
I stands for ISolate the variable.
D stands for Divide both sides by the coefficient of $x$.

Algebra I Solving Equations The SID Method

$$
\text { 16. } \begin{aligned}
& 4(x+2)+3(2 x+5)=3 x+5(x+7) \\
& 4 x+8+6 x+15=3 x+5 x+35 \\
& 10 x+23=8 x+35 \\
& 2 x+23=35 \\
& 2 x=12 \\
& x=6
\end{aligned}
$$

## Divide both sides <br> by 2

## The SID Method

S stands for Simplify the expression on each side.
I stands for ISolate the variable.
D stands for Divide both sides by the coefficient of $\mathbf{x}$.

Algebra I Solving Equations The SID Method
16. $4(x+2)+3(2 x+5)=3 x+5(x+7)$

$$
\begin{gathered}
4 x+8+6 x+15=3 x+5 x+35 \\
10 x+23=8 x+35 \\
2 x+23=35 \\
2 x=12 \\
x=6
\end{gathered}
$$

## The SID Method

S stands for Simplify the expression on each side.
I stands for ISolate the variable.
D stands for Divide both sides by the coefficient of $\mathbf{x}$.

Algebra I Solving Equations The SID Method
17. $\mathbf{5 ( 3 x}-4)+4 x=7 x+2(x+5)$

## The SID Method

Algebra I Solving Equations The SID Method
17. $\mathbf{5 ( 3 x}-4)+4 x=7 x+2(x+5)$

## The SID Method

S stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method
17. $5(3 x-4)+4 x=7 x+2(x+5)$

## The SID Method

S stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method

$$
\text { 17. } 5(3 x-4)+4 x=7 x+2(x+5)
$$

15x

## The SID Method

S stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method
17. $\mathbf{5 ( 3 x}-4)+4 x=7 x+2(x+5)$

15x-20

## The SID Method

S stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method
17. $5(3 x-4)+4 x=7 x+2(x+5)$

$$
15 x-20+4 x
$$

## The SID Method

$\mathbf{S}$ stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method
17. $\mathbf{5 ( 3 x}-4)+4 x=7 x+2(x+5)$

$$
15 x-20+4 x=
$$

## The SID Method

$\mathbf{S}$ stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method
17. $\mathbf{5 ( 3 x}-4)+4 x=7 x+2(x+5)$

$$
15 x-20+4 x=7 x+
$$

## The SID Method

$\mathbf{S}$ stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method
17. $5(3 x-4)+4 x=7 x+2(x+5)$

$$
15 x-20+4 x=7 x+
$$

## The SID Method

$\mathbf{S}$ stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method
17. $5(3 x-4)+4 x=7 x+2(x+5)$

$$
15 x-20+4 x=7 x+2 x
$$

## The SID Method

S stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method
17. $\mathbf{5 ( 3 x}-4)+4 x=7 x+2(x+5)$

$$
15 x-20+4 x=7 x+2 x+10
$$

## The SID Method

$\mathbf{S}$ stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method
17. $\mathbf{5 ( 3 x}-4)+4 x=7 x+2(x+5)$

$$
15 x-20+4 x=7 x+2 x+10
$$

## The SID Method

$\mathbf{S}$ stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method
17. $\mathbf{5}(3 \mathrm{x}-4)+4 \mathrm{x}=7 \mathrm{x}+2(\mathrm{x}+5)$

$$
15 x-20+4 x=7 x+2 x+10
$$

## The SID Method

S stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method
17. $\mathbf{5}(3 \mathrm{x}-4)+4 \mathrm{x}=7 \mathrm{x}+2(\mathrm{x}+5)$

$$
15 x-20+4 x=7 x+2 x+10
$$

19x

## The SID Method

$\mathbf{S}$ stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method
17. $\mathbf{5 ( 3 x}-4)+4 x=7 x+2(x+5)$

$$
15 x-20+4 x=7 x+2 x+10
$$

$$
19 x-20
$$

## The SID Method

$\mathbf{S}$ stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method
17. $\mathbf{5 ( 3 x}-4)+4 x=7 x+2(x+5)$

$$
\begin{aligned}
15 x-20+4 x & =7 x+2 x+10 \\
19 x-20 & =
\end{aligned}
$$

## The SID Method

S stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method

$$
\text { 17. } \begin{aligned}
5(3 x-4)+4 x & =7 x+2(x+5) \\
15 x-20+4 x & =7 x+2 x+10 \\
19 x-20 & =
\end{aligned}
$$

## The SID Method

S stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method

$$
\text { 17. } \begin{aligned}
5(3 x-4)+4 x & =7 x+2(x+5) \\
15 x-20+4 x & =7 x+2 x+10 \\
19 x-20 & =9 x
\end{aligned}
$$

## The SID Method

S stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method

$$
\text { 17. } \begin{aligned}
5(3 x-4)+4 x & =7 x+2(x+5) \\
15 x-20+4 x & =7 x+2 x+10 \\
19 x-20 & =9 x+10
\end{aligned}
$$

## The SID Method

S stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method
17. $\mathbf{5 ( 3 x}-4)+4 \mathrm{x}=7 \mathrm{x}+2(\mathrm{x}+5)$

$$
\begin{aligned}
15 x-20+4 x & =7 x+2 x+10 \\
19 x-20 & =9 x+10
\end{aligned}
$$

## The SID Method

S stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method
17. $\mathbf{5 ( 3 x}-4)+4 x=7 x+2(x+5)$

$$
\begin{aligned}
15 x-20+4 x & =7 x+2 x+10 \\
19 x-20 & =9 x+10
\end{aligned}
$$

## The SID Method

$\mathbf{S}$ stands for Simplify the expression on each side.
I stands for ISolate the variable.

Algebra I Solving Equations The SID Method
17. $\mathbf{5 ( 3 x}-4)+4 x=7 x+2(x+5)$

$$
\begin{aligned}
15 x-20+4 x & =7 x+2 x+10 \\
19 x-20 & =9 x+10
\end{aligned}
$$

# Subtract 9x from <br> both sides. 

## The SID Method

S stands for Simplify the expression on each side.
I stands for ISolate the variable.

Algebra I Solving Equations The SID Method
17. $\mathbf{5}(3 \mathrm{x}-4)+4 \mathrm{x}=7 \mathrm{x}+2(\mathrm{x}+5)$

$$
\begin{gathered}
15 x-20+4 x=7 x+2 x+10 \\
19 x-20=9 x+10 \\
10 x
\end{gathered}
$$

# Subtract 9x from both sides. 

## The SID Method

S stands for Simplify the expression on each side.
I stands for ISolate the variable.

Algebra I Solving Equations The SID Method
17. $\mathbf{5 ( 3 x}-4)+4 x=7 x+2(x+5)$

$$
15 x-20+4 x=7 x+2 x+10
$$

$$
19 x-20=9 x+10
$$

# Subtract 9x from both sides. 

$$
10 x-20
$$

## The SID Method

S stands for Simplify the expression on each side.
I stands for ISOlate the variable.

Algebra I Solving Equations The SID Method
17. $\mathbf{5 ( 3 x}-4)+4 x=7 x+2(x+5)$

$$
\begin{gathered}
15 x-20+4 x=7 x+2 x+10 \\
19 x-20=9 x+10 \\
10 x-20=10
\end{gathered}
$$

# Subtract 9x from both sides. 

## The SID Method

S stands for Simplify the expression on each side.
I stands for ISOlate the variable.

Algebra I Solving Equations The SID Method
17. $\mathbf{5 ( 3 x}-4)+4 \mathrm{x}=7 \mathrm{x}+2(\mathrm{x}+5)$

$$
\begin{gathered}
15 x-20+4 x=7 x+2 x+10 \\
19 x-20=9 x+10 \\
10 x-20=10
\end{gathered}
$$

## The SID Method

S stands for Simplify the expression on each side.
I stands for ISolate the variable.

Algebra I Solving Equations The SID Method
17. $\mathbf{5}(3 \mathrm{x}-4)+4 \mathrm{x}=7 \mathrm{x}+2(\mathrm{x}+5)$

$$
\begin{gathered}
15 x-20+4 x=7 x+2 x+10 \\
19 x-20=9 x+10 \\
10 x-20=10
\end{gathered}
$$

Add 20
to both sides.

## The SID Method

S stands for Simplify the expression on each side.
I stands for ISolate the variable.

Algebra I Solving Equations The SID Method
17. $\mathbf{5}(3 \mathrm{x}-4)+4 \mathrm{x}=7 \mathrm{x}+2(\mathrm{x}+5)$

$$
15 x-20+4 x=7 x+2 x+10
$$

$$
19 x-20=9 x+10
$$

> Add 20
> to
> both sides.

$$
10 x-20=10
$$

$$
10 \mathrm{x}=
$$

## The SID Method

S stands for Simplify the expression on each side.
I stands for ISolate the variable.

Algebra I Solving Equations The SID Method
17. $\mathbf{5}(3 \mathrm{x}-4)+4 \mathrm{x}=7 \mathrm{x}+2(\mathrm{x}+5)$

$$
\begin{gathered}
15 x-20+4 x=7 x+2 x+10 \\
19 x-20=9 x+10 \\
10 x-20=10 \\
10 x=30
\end{gathered}
$$

Add 20
to
both sides.

## The SID Method

S stands for Simplify the expression on each side.
I stands for ISOlate the variable.

Algebra I Solving Equations The SID Method
17. $5(3 x-4)+4 x=7 x+2(x+5)$

$$
\begin{gathered}
15 x-20+4 x=7 x+2 x+10 \\
19 x-20=9 x+10 \\
10 x-20=10 \\
10 x=30
\end{gathered}
$$

## The SID Method

S stands for Simplify the expression on each side.
I stands for ISolate the variable.

Algebra I Solving Equations The SID Method
17. $\mathbf{5 ( 3 x}-4)+4 \mathrm{x}=7 \mathrm{x}+2(\mathrm{x}+5)$

$$
\begin{gathered}
15 x-20+4 x=7 x+2 x+10 \\
19 x-20=9 x+10 \\
10 x-20=10 \\
10 x=30
\end{gathered}
$$

## The SID Method

S stands for Simplify the expression on each side.
I stands for ISolate the variable.
D stands for Divide both sides by the coefficient of $x$.

Algebra I Solving Equations The SID Method
17. $\mathbf{5}(3 \mathrm{x}-4)+4 \mathrm{x}=7 \mathrm{x}+2(\mathrm{x}+5)$

$$
\begin{gathered}
15 x-20+4 x=7 x+2 x+10 \\
19 x-20=9 x+10 \\
10 x-20=10 \\
10 x=30
\end{gathered}
$$

## Divide both sides by 10

## The SID Method

S stands for Simplify the expression on each side.
I stands for ISolate the variable.
D stands for Divide both sides by the coefficient of $x$.

Algebra I Solving Equations The SID Method
17. $\mathbf{5}(3 \mathrm{x}-4)+4 \mathrm{x}=7 \mathrm{x}+2(\mathrm{x}+5)$

$$
\begin{gathered}
15 x-20+4 x=7 x+2 x+10 \\
19 x-20=9 x+10 \\
10 x-20=10 \\
10 x=30 \\
x=
\end{gathered}
$$

## Divide both sides by 10

## The SID Method

S stands for Simplify the expression on each side.
I stands for ISolate the variable.
D stands for Divide both sides by the coefficient of $x$.

Algebra I Solving Equations The SID Method
17. $\mathbf{5}(3 \mathrm{x}-4)+4 \mathrm{x}=7 \mathrm{x}+2(\mathrm{x}+5)$

$$
\begin{gathered}
15 x-20+4 x=7 x+2 x+10 \\
19 x-20=9 x+10 \\
10 x-20=10 \\
10 x=30 \\
x=3
\end{gathered}
$$

## Divide

 both sides by 10
## The SID Method

S stands for Simplify the expression on each side.
I stands for ISolate the variable.
D stands for Divide both sides by the coefficient of $x$.

Algebra I Solving Equations The SID Method
17. $\mathbf{5 ( 3 x}-4)+4 \mathrm{x}=7 \mathrm{x}+2(\mathrm{x}+5)$

$$
\begin{gathered}
15 x-20+4 x=7 x+2 x+10 \\
19 x-20=9 x+10 \\
10 x-20=10 \\
10 x=30 \\
x=3
\end{gathered}
$$

## The SID Method

S stands for Simplify the expression on each side.
I stands for ISolate the variable.
D stands for Divide both sides by the coefficient of $x$.

Algebra I Solving Equations The SID Method
18. $\mathbf{4}(\mathbf{x}+5)+\mathbf{3}(\mathbf{x}-9)=\mathbf{3 5}$

## The SID Method

Algebra I Solving Equations The SID Method
18. $\mathbf{4}(\mathbf{x}+5)+\mathbf{3}(\mathbf{x}-9)=\mathbf{3 5}$

## The SID Method

$\mathbf{S}$ stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method
18. $4(x+5)+3(x-9)=35$

## The SID Method

S stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method
18. $4(x+5)+3(x-9)=35$

4x

## The SID Method

$\mathbf{S}$ stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method
18. $4(x+5)+3(x-9)=35$
$4 x+20+$

## The SID Method

$\mathbf{S}$ stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method
18. $4(x+5)+3(x-9)=35$

$$
4 x+20+
$$

## The SID Method

$\mathbf{S}$ stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method

$$
\text { 18. } \begin{array}{ll} 
& 4(x+5)+3(x-9)=35 \\
& 4 x+20+3 x
\end{array}
$$

## The SID Method

S stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method

$$
\text { 18. } \begin{array}{ll}
4(x+5)+3(x-9)=35 \\
& 4 x+20+3 x-27
\end{array}
$$

## The SID Method

S stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method

$$
\text { 18. } \begin{array}{ll}
4(x+5)+3(x-9)=35 \\
& 4 x+20+3 x-27=
\end{array}
$$

## The SID Method

S stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method

$$
\text { 18. } \begin{array}{ll}
4(x+5)+3(x-9)=35 \\
& 4 x+20+3 x-27=35
\end{array}
$$

## The SID Method

$\mathbf{S}$ stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method

$$
\text { 18. } \begin{aligned}
& 4(x+5)+3(x-9)=35 \\
& 4 x+20+3 x-27=35
\end{aligned}
$$

## The SID Method

$\mathbf{S}$ stands for Simplify the expression on each side.

## Algebra I Solving Equations The SID Method

$$
\text { 18. } \begin{aligned}
& 4(x+5)+3(x-9)=35 \\
& 4 x+20+3 x-27=35
\end{aligned}
$$

$$
7 x
$$

## The SID Method

S stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method

$$
\text { 18. } \begin{gathered}
4(x+5)+3(x-9)=35 \\
4 x+20+3 x-27=35 \\
7 x
\end{gathered}
$$

## The SID Method

S stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method

$$
\text { 18. } \begin{aligned}
& 4(x+5)+3(x-9)=35 \\
& 4 x+20+3 x-27=35 \\
& 7 x
\end{aligned}
$$

## The SID Method

$\mathbf{S}$ stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method

$$
\text { 18. } \begin{gathered}
4(x+5)+3(x-9)=35 \\
4 x+20+3 x-27=35 \\
7 x-7
\end{gathered}
$$

## The SID Method

$\mathbf{S}$ stands for Simplify the expression on each side.

Algebra I Solving Equations The SID Method

$$
\text { 18. } \begin{gathered}
4(x+5)+3(x-9)=35 \\
4 x+20+3 x-27=35 \\
7 x-7=
\end{gathered}
$$

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Algebra I Solving Equations The SID Method

$$
\text { 18. } \begin{gathered}
4(x+5)+3(x-9)=35 \\
4 x+20+3 x-27=35 \\
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Algebra I Solving Equations The SID Method

$$
\text { 18. } \begin{gathered}
4(x+5)+3(x-9)=35 \\
4 x+20+3 x-27=35 \\
7 x-7=35
\end{gathered}
$$

## The SID Method

S stands for Simplify the expression on each side.
I stands for Isolate the variable.

Algebra I Solving Equations The SID Method

$$
\text { 18. } \begin{gathered}
4(x+5)+3(x-9)=35 \\
4 x+20+3 x-27=35 \\
7 x-7=35
\end{gathered}
$$

# Add 7 <br> to <br> both sides. 

## The SID Method

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Algebra I Solving Equations The SID Method

$$
\text { 18. } \begin{gathered}
4(x+5)+3(x-9)=35 \\
4 x+20+3 x-27=35 \\
7 x-7=35 \\
7 x=
\end{gathered}
$$

## The SID Method

S stands for Simplify the expression on each side.
I stands for ISOlate the variable.

Algebra I Solving Equations The SID Method

$$
\text { 18. } \begin{gathered}
4(x+5)+3(x-9)=35 \\
4 x+20+3 x-27=35 \\
7 x-7=35 \\
7 x=42
\end{gathered}
$$

## The SID Method

S stands for Simplify the expression on each side.
I stands for ISOlate the variable.

Algebra I Solving Equations The SID Method

$$
\text { 18. } \begin{gathered}
4(x+5)+3(x-9)=35 \\
4 x+20+3 x-27=35 \\
7 x-7=35 \\
7 x=42
\end{gathered}
$$

## The SID Method

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I stands for ISolate the variable.

Algebra I Solving Equations The SID Method

$$
\text { 18. } \begin{gathered}
4(x+5)+3(x-9)=35 \\
4 x+20+3 x-27=35 \\
7 x-7=35 \\
7 x=42
\end{gathered}
$$

## The SID Method

S stands for Simplify the expression on each side.
I stands for ISolate the variable.
D stands for Divide both sides by the coefficient of $\mathbf{x}$.

Algebra I Solving Equations The SID Method
18. $\mathbf{4}(\mathbf{x}+5)+\mathbf{3}(\mathbf{x}-9)=\mathbf{3 5}$

$$
\begin{gathered}
4 x+20+3 x-27=35 \\
7 x-7=35
\end{gathered}
$$

> Divide both sides
> by 7

$$
7 x=42
$$

## The SID Method

S stands for Simplify the expression on each side.
I stands for ISolate the variable.
D stands for Divide both sides by the coefficient of $x$.

Algebra I Solving Equations The SID Method
18. $\mathbf{4}(\mathbf{x}+5)+\mathbf{3}(\mathbf{x}-9)=\mathbf{3 5}$

$$
\begin{gathered}
4 x+20+3 x-27=35 \\
7 x-7=35
\end{gathered}
$$

## Divide both sides <br> by 7

$$
7 x=42
$$

$$
\mathbf{x}=
$$

## The SID Method

S stands for Simplify the expression on each side.
I stands for ISolate the variable.
D stands for Divide both sides by the coefficient of $\mathbf{x}$.

Algebra I Solving Equations The SID Method
18. $\mathbf{4}(\mathbf{x}+5)+\mathbf{3}(\mathbf{x}-9)=\mathbf{3 5}$

$$
\begin{gathered}
4 x+20+3 x-27=35 \\
7 x-7=35
\end{gathered}
$$

## Divide both sides <br> by 7

$$
7 x=42
$$

$$
x=6
$$

## The SID Method

S stands for Simplify the expression on each side.
I stands for ISolate the variable.
D stands for Divide both sides by the coefficient of $x$.

Algebra I Solving Equations The SID Method

$$
\text { 18. } \begin{gathered}
4(x+5)+3(x-9)=35 \\
4 x+20+3 x-27=35 \\
7 x-7=35 \\
7 x=42 \\
x=6
\end{gathered}
$$

## The SID Method

$\mathbf{S}$ stands for Simplify the expression on each side.
I stands for ISolate the variable.
D stands for Divide both sides by the coefficient of x .

Algebra I Solving Equations The SID Method

$$
\begin{gathered}
\text { 18. } 4(x+5)+3(x-9)=35 \\
4 x+20+3 x-27=35 \\
7 x-7=35 \\
\text { Good luck on worksheet \#8 !! }
\end{gathered}
$$

## The SID Method

$\mathbf{S}$ stands for Simplify the expression on each side.
I stands for ISOlate the variable.
D stands for Divide both sides by the coefficient of $\mathbf{x}$.

