

Solving Equations with Variables on Both Sides

Nov. 16

P. 355

$$3. \quad 5x = 4x + 7$$

$$x = 7$$

$$4. \quad 6y = 7y - 4$$

$$-1y = -4$$

$$y = 4$$

$$11. \quad \overset{-5x}{2x} = -30 + \overset{-5x}{5x}$$

$$\frac{-3x}{-3} = \frac{-30}{-3}$$

$$x = 10$$

Left Side

$$\begin{aligned} 2x \\ = 2(10) \\ = 20 \end{aligned}$$

Right Side

$$\begin{aligned} -30 + 5x \\ -30 + 5(10) \\ -30 + 50 \\ 20 \end{aligned}$$

✓

17.

$$2x + 3x = 8x - 3$$

$$5x \overset{-8x}{=} 8x - 3 \overset{-8x}{=}$$

$$\begin{array}{r} -3x = -3 \\ \hline x = 1 \end{array}$$

$$21. \overset{-55}{65} + 45 = 20 + \overset{-55}{55}$$

$$105 - 55 = 20$$

$$\underline{55} = \underline{20}$$

$$\underline{5} \quad \underline{5}$$

$$5 = 4$$

25. $5x - 3x = \overset{-4x}{\cancel{4x}} - 2$

$$2x - 4x = -2$$

$$\frac{-2x}{-2} = \frac{-2}{-2}$$

$$x = 1$$

LS	RS
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$5x - 3x$	$4x - 2$
$5(1) - 3(1)$	$4(1) - 2$
2	2

$$33. \quad 15x \overset{+5x}{\text{---}} \overset{+5x}{-7x} = -52 - 5x$$

$$8x + 5x = -52$$

$$\frac{13x}{13} = \frac{-52}{13}$$

$$x = -4$$

Homework

p 355 - 12, 14, 16, 22, 23, 24,
26, 29, 31, 34, 37, 38,
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