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Worksheets

$$\frac{4(x)}{4} = 5(4)$$
$$x = 20$$

Solving "Tricky" 2-Step Equations

TSE 4

Instructions: Some 2-Step Equations are tricky because of the location of the unknown in operations that don't commute (subtraction and division). One way to solve these equations is to do an extra initial step to re-arrange the equation so that it looks like one you already know how to solve.

1 $(x+5)\dfrac{12}{x+5} = 2(x+5)$

$$\frac{12}{2} = \frac{2(x+5)}{2}$$

$$\begin{aligned}6 &= x + 5\\ -5 & \quad -5\end{aligned}$$

$$1 = x \quad \text{or} \quad \boxed{x = 1}$$

2 $(x-4)\dfrac{21}{x-4} = 7(x-4)$

$$\frac{21}{7} = \frac{7(x-4)}{7}$$

$$\begin{aligned}3 &= x - 4\\ +4 & \quad +4\end{aligned}$$

$$7 = x$$

$$\frac{21}{7-4} = 7$$
$$\frac{21}{3} = 7$$
$$7 = 7$$

3 $11 = 23 + {}^-4x$

4 $27 + {}^-3x = 15$

$$\begin{aligned} &\quad\ \ -27 \quad\quad -27\end{aligned}$$

$$27 - 3(4) = 15$$
$$27 - 12 = 15$$

$$\frac{{}^-3x}{-3} = \frac{{}^-12}{-3}$$

$$x = 4$$

$$15 - 27$$
$$15 + ({}^-27) = {}^-12$$

5 $8 = \dfrac{24}{x-3}$

6 $7 = \dfrac{77}{x+6}$

7 $41 - 2x = 9$

8 $25 = 80 - 11x$

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