REFLECT

1a. In what way are these two methods for solving equations similar?

1b. To solve an equation, you isolate the variable by performing _____ operations in the _____ order from the order in which they are applied to the variable in the original equation.

2 EXPLORE Solving Two-Step Equations that Contain Fractions

Use a table to help you solve each equation.

A $22 = \frac{n}{4} + 7$

SEE ↓ OPP.

Operations in the Equation	To Solve
1. First n is DIVIDED BY 4.	1. First SUBTRACT 7 on both sides of the equation.
2. Then, ADDED BY 7.	2. Then multiply both sides by 4.

Solution

$22 = \frac{n}{4} + 7$

$22 - 7 = \frac{n}{4} + 7 - 7$

$15(4) = \frac{n}{4}(4)$

$60 = n$

B $\frac{2x}{3} = 12$

Operations in the Equation	To Solve
1. First x is multiplied by 2.	1. First multiply both sides by 3.
2. Then, divided by 3.	2. Then divide both sides by 2.

Solution

$\frac{2x}{3} = 12$

$\frac{2x}{3}(3) = 12(3)$

$2x \div 2 = 36 \div 2$

$x = 18$

TRY THIS!

Solve each equation.

2a. $\frac{x}{3} + 10 = 40$

2b. $\frac{x}{2} - 9 = 4$

2c. $\frac{2x}{5} = 6$