

TOPIC 1: Review solving Equations (including VOB)

Solve the following equations. Show all algebraic work.

Review Example: 1

$$\begin{array}{r}
 4x + 3 = 5x + 7 \\
 -5x \quad -5x \\
 \hline
 -x + 3 = x + 7 \\
 \quad -3 \quad -3 \\
 \hline
 -x = 4 \\
 \frac{-1}{-1} \quad \frac{-1}{-1} \\
 \hline
 x = -4
 \end{array}$$

Review Example: 2

$$\begin{array}{r}
 \frac{x-3}{x} = \frac{9}{10} \\
 9x = 10(x-3) \\
 9x = 10x - 30 \\
 -10x \quad -10x \\
 \hline
 -x = -30 \\
 \frac{-1}{-1} \quad \frac{-1}{-1} \quad \boxed{x=30}
 \end{array}$$

ON YOUR OWN: Solve for the variable.

1. $18 + 2n = 4n - 9$

2. $\frac{g-1}{3} = 12$

Review Example: 3

$$\begin{array}{r}
 3(x-2) = 4x + 5 \\
 3x - 6 = 4x + 5 \\
 \quad -5 \quad \quad -5 \\
 \hline
 3x - 11 = 4x \\
 -4x \quad -4x \\
 \hline
 -x - 11 = 0 \\
 \quad +11 \quad +11 \\
 \hline
 -x = 11 \\
 \frac{-1}{-1} \quad \frac{-1}{-1} \\
 \hline
 \boxed{x = -11}
 \end{array}$$

You may have done these steps in a different order. That is ok if you end up with $x = -11$