Objective 4 - Solve Linear Equations

Solve linear equations.

Link to section in online textbook.

Now, watch this video to review how to solve linear equations. These techniques will be used throughout most of the semester. Be sure to write notes to yourself that you can review later!

Now try to solve the following linear equations.

Question 1 *Solve the equation below.*

$-14(-11\,x - 10) = -7(5\,x - 12)$

$x =$ $\boxed{-0.2962962962962963}$

Question 2 *Solve the equation below.*

$-15(8\,x - 10) = -5(3\,x + 11)$

$x =$ $\boxed{1.9523809523809523}$

Question 3 *Solve the equation below.*

$-4(-10\,x + 13) = -14(-3\,x - 11)$

$x =$ $\boxed{-103.0}$

Question 4 *Solve the equation below.*

$$\frac{-3\,x + 3}{4} - \frac{-7\,x + 7}{3} = \frac{-6\,x - 6}{2}$$

Hint: *Adding/Multiplying fractions can be difficult and tedious. Is there something we can multiply both sides of the equation by to remove the fractions from the equation?*

$x =$ $\boxed{-0.309}$

Learning outcomes: Recognize and construct linear functions as well as solve linear equations.

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Question 5 *Solve the equation below.*

$$\frac{-5\,x-4}{3}-\frac{7\,x-3}{4}=\frac{-8\,x-4}{5}$$

$x=\boxed{0.119}$

Question 6 *Solve the equation below.*

$$\frac{6\,x-5}{3}-\frac{8\,x+5}{4}=\frac{-5\,x-8}{2}$$

$x=\boxed{-0.433}$
