

You may have forgotten to distribute the 7 to the x on the right side of the equation. The correct simplification is $5x + 20 - 7x = 21 + 7x - 3x$. This will simplify further to $-2x + 20 = 21 + 4x$. This equation has the solution $x = -\frac{1}{6}$. The correct answer is $5x + 20 - x = 7(3 + x) - 3x$.