Correct. Add the second and third equations: $a + 3b = 12$

Multiply the first equation by -3: $-12a - 3b = 21$

Add these equations: $-11a = 33$, so $a = -3$

Substitute into the first equation: $-12 + b = -7$, so $b = 5$

Substitute the value for b into the third equation: $15 + 2c = 7$, so $c = -4$

Check your solution in all three equations.