Algebraic proof - Identities

If asked to prove that something is ≡ to something then this is an identity and not an equation

Example:-

Prove that $\frac{2x}{7} - \frac{x-3}{2} + \frac{3x+2}{21} \equiv \frac{67-3x}{42}$

You need to make changes to the left hand side till you get it to look like the right hand side.
Write it as below:-

$$\frac{2x}{7} - \frac{x-3}{2} + \frac{3x+2}{21}$$ LCM of 7, 2, and 21 is 42

$$= \frac{12x}{42} - \frac{21(x-3)}{42} + \frac{2(3x+2)}{42}$$

$$= \frac{12x - 21x + 63 + 6x + 4}{42}$$

$$= \frac{67 - 3x}{42}$$