

Correct. You recognized that $\frac{(x+2)(x-5)}{x^2+7x+10} = \frac{(x+2)(x-5)}{(x+2)(x+5)} \cdot \frac{x+2}{x+2} = 1$, so $\frac{(x+2)(x-5)}{(x+2)(x+5)} = 1 \cdot \frac{x-5}{x+5} = \frac{x-5}{x+5}$.