

It appears that you combined the original numerators while changing the denominators to the correct LCD. Instead, rewrite each term as an *equivalent* fraction before adding or subtracting:

$$\frac{3x^2}{x^2 - 9} - \frac{3x}{x + 3} + \frac{3}{x - 3} = \frac{3x^2}{(x + 3)(x - 3)} - \frac{(3x)(x - 3)}{(x + 3)(x - 3)} + \frac{3(x + 3)}{(x - 3)(x + 3)}$$

Then simplify and combine the numerators.