You may have correctly rewritten each fraction with the least common multiple (LCM) as the denominator:

$$\frac{3x-2}{x-2} - \frac{x-1}{x^2 - 5x + 6} = \frac{(3x-2)(x-3)}{(x-2)(x-3)} - \frac{x-1}{(x-2)(x-3)}$$

Here you may have incorrectly multiplied (3x - 2) by (x - 3), obtaining $(3x^2 + 6)$. Remember to use FOIL.