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$$\frac{\frac{1}{x+1} + \frac{1}{x+2}}{\frac{1}{x^2+3x+2} + 1} =$$

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▸ We saw with fractions that we can simplify compound fractions. Similarly, we can also have compound Rational Expressions:

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▸ Like Example 1 we want to reduce the fractions $\frac{1}{x+1}$, $\frac{1}{x+2}$, and $\frac{1}{x^2+3x+2}$

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$$= \frac{x+2+x+1}{1+(x+1)(x+2)}$$

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

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