

# A review of partial fraction decomposition ↕

It is common that we obtain some sort of rational function  $\frac{p(x)}{q(x)}$  (really, it will be functions  $\frac{F(s)}{G(s)}$ ) which we need to re-express as a sum of more simplified quotient functions. A common approach that must be utilized is that of *partial fraction decomposition*, which you have seen in a Calculus II class.

In the video below, we briefly review the basic setup of partial fraction decomposition. The Wikipedia articles linked provide additional information and examples. Finally, the linked APEX calculus textbook in the resource section of the class has an even more thorough discussion.

## Discussion, comments, and examples:



Math45-Module-16-Video-04

## WeBWork module 16 exercises:

- Problems 9, 10, 11

## Relevant Wikipedia articles:

- [The procedure of partial fraction decomposition](https://en.wikipedia.org/wiki/Partial_fraction_decomposition#Procedure) ↗  
([https://en.wikipedia.org/wiki/Partial\\_fraction\\_decomposition#Procedure](https://en.wikipedia.org/wiki/Partial_fraction_decomposition#Procedure))
- [Some examples](https://en.wikipedia.org/wiki/Partial_fraction_decomposition#Examples) ↗ ([https://en.wikipedia.org/wiki/Partial\\_fraction\\_decomposition#Examples](https://en.wikipedia.org/wiki/Partial_fraction_decomposition#Examples))