## 2.3 Quotient Rule

Standard: MCD1e

This was created by Keenan Xavier Lee, 2013. See my website for more information, lee-apcalculus.weebly.com.

Let's consider the function: f(x) $q(\mathbf{X})$ We want to find the derivative of the function.  $\left(\frac{f}{g}\right) = \frac{g \cdot f' - f \cdot g'}{g^2} \leftarrow Quotient Rule$  $(Example 1) y = \frac{2x+5}{3x-2}$ . Find y y' = (3x-2)(2) - (2x+5)(3) $(3x-2)^{2}$ = (6x-4) - (6x+15) $(3x-2)^{2}$  $= \frac{6x - 4 - 6x - 15}{(3x - 2)^2}$ = -19  $(3x - 2)^2$ 

This was created by Keenan Xavier Lee, 2013. See my website for more information, lee-apcalculus.weebly.com.