

### Integration with Partial Fractions HW

Evaluate the Integral.

1.  $\int \frac{2x+16}{x^2+x-6} dx$

2.  $\int \frac{x^2-6}{x^2-9} dx$

3.  $\int \frac{3dx}{x^2+9}$

4.  $\int \frac{1-3x}{3x^2-5x+2} dx$

5.  $\int \frac{5x+14}{x^2+7x} dx$

Solve the differential equation.

6.  $\frac{du}{dx} = \frac{2}{x^2-1}$

7.  $G'(t) = \frac{2t^3}{t^3-t}$

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