

## Homework due Sep 8 - extra problems

Evaluate the following integrals

1. 
$$\int \frac{3x^2 - 8x + 1}{x^3 - 4x^2 + x + 6} dx \quad (1)$$

2. 
$$\int \frac{10x + 2}{x^3 - 5x^2 + x - 5} dx \quad (2)$$

3. 
$$\int \frac{x^4 + 3x^3 + 2x^2 + 1}{x^2 + 3x + 2} dx \quad (3)$$

4. 
$$\int \frac{1}{\sqrt{9 - 4x^2}} dx \quad (4)$$

5. 
$$\int \frac{1}{x^2 + 4x + 5} dx \quad (5)$$

6. 
$$\int \frac{1}{\sqrt{4x - 3 - x^2}} dx \quad (6)$$