AB Calculus   INTEGRATION REVIEW # 4
            Includes Improper Rational Functions and Repeated Linear Factors

1. $\int \dfrac{x}{x-6} dx$

11. $\int \dfrac{x+2}{x^2+x} dx$

2. $\int \dfrac{x-2}{(x^2-4x+4)} dx$

12. $\int \dfrac{1}{x^2-8x+16} dx$

3. $\int \dfrac{1}{(x+4)(x-1)} dx$

13. $\int \dfrac{x+2}{2x^2+3x+1} dx$

4. $\int \dfrac{1}{x^2-1} dx$

14. $\int \dfrac{12x^6-14x^4+x^2}{x^2} dx$

5. $\int \dfrac{x+1}{(2x+1)(2x+1)} dx$

15. $\int \dfrac{x^4+3x^3+2x^2+1}{x^2+3x+2} dx$

6. $\int \dfrac{x^3-4x-10}{x^2-x-6} dx$

16. $\int \dfrac{1}{x^2+5x+4} dx$

7. $\int \dfrac{3x}{x^2-5x} dx$

17. $\int \dfrac{x^3}{x^2+3x+2} dx$

8. $\int \dfrac{x^2}{x+4} dx$

18. $\int \dfrac{x^2+1}{x^2-3x+2} dx$

9. $\int \dfrac{4x^2-7x-12}{x(x+2)(x-3)} dx$

19. $\int \dfrac{dx}{x^2+x}$

10. $\int \dfrac{x+4}{\sqrt{x}} dx$

20. $\int \dfrac{2x+1}{(9x^2+6x+1)} dx$