

MAT 1352 - CÁLC. PARA FUNÇÕES DE UMA VAR. II
2º SEMESTRE 2013

LISTA 4

Determine as seguintes primitivas:

(a) $\int \frac{3x^2+4x+5}{x^3-6x^2+11x-6} dx;$

(b) $\int \frac{3x^2+4x+5}{x^3-4x^2+5x-2} dx;$

(c) $\int \frac{x^5+x+1}{x^3-8} dx;$

(d) $\int \frac{x}{x^2-4} dx;$

(e) $\int \frac{3x^2+5x+4}{x^3+x^2+x-3} dx;$

(f) $\int \frac{x^5+x+1}{x^3-8} dx;$

(g) $\int \frac{x}{x^2+2x+3} dx;$

(h) $\int \frac{x+1}{x^2(x^2+4)} dx;$

(i) $\int \frac{x+1}{x^2(x^2+4)^2} dx;$

(j) $\int \frac{\arctg x}{x^2} dx;$

(k) $\int \frac{4x^2-3x+3}{(x^2-2x+2)(x+1)} dx;$

(l) $\int \frac{1}{x^2-2x+2} dx;$

(m) $\int \frac{1}{1+e^x} dx;$

(n) $\int \frac{x^2+3x+1}{x^2-2x-3} dx;$

(o) $\int \frac{x}{x^2-5x+6} dx;$

(p) $\int \frac{x^3+x+1}{x^2-2x+1} dx;$

(q) $\int \frac{2x+1}{x^2-1} dx;$

(r) $\int \frac{x+3}{(x-1)^2} dx;$

(s) $\int \frac{x+3}{x^2-x} dx;$

(t) $\int \frac{x^2+x+1}{x^2-x} dx;$

(u) $\int \frac{x^3+x+1}{x^2-4x+3} dx;$

(v) $\int \frac{x^2+3}{x^2-9} dx;$

(w) $\int \frac{x+1}{x^3+2x^2+5x} dx;$

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

(y) $\int \frac{x^4+2x^2-8x+4}{x^3-8} dx;$

(z) $\int \frac{x^5+3}{x^3-4x} dx;$