- 1. (partial fractions:22/7-pi) Compute  $\int_0^1 \frac{x^4(1-x)^4}{1+x^2} dx.$
- 2. (partial fractions:(x-1)/(x2+x)) Compute  $\int \frac{w-1}{w^2+w}dw$
- 3. (partial fractions:p) Compute  $\int \frac{p+2}{p^2-1} dp$
- 4. (partialfractions:nopf) Compute  $\int \frac{x}{x^2-1} dx$ .
- 5. (partial fractions:simple1) Compute  $\int \frac{1}{x^2-4} dx$ .
- 6. (partialfractions:cts1) Compute  $\int \frac{1}{x^2+6x+10} dx$ .
- 7. (partial fractions:division1) Compute  $\int \frac{x^3}{x^2+2} dx$ .
- 8. (partial fractions:doubleroot1) Compute  $\int \frac{x}{x^2-2x+1} dx.$
- 9. (partial fractions:expsub) Compute  $\int \frac{dt}{2+e^{2t}}.$