

MORE ON THE 'series_op' PROCEDURE

> read series4b;

$$s_1 := 1 + a_1 x + a_2 x^2 + a_3 x^3 + a_4 x^4$$

$$s_2 := 1 + b_1 x + b_2 x^2 + b_3 x^3 + b_4 x^4$$

$$s_3 := 1 + c_1 x + c_2 x^2 + c_3 x^3 + c_4 x^4$$

> eval(series_op);

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proc(series_in)
  solve(
    {coeffs(P(s[3])-P(series(series_in,x = 0,5)),x)},
    unknowns)
end
```

'series_op' returns a SET of equations which define the coefficients c[1], c[2], ... etc. in terms of the a[i] and b[i]. To extract the value of a specific coefficient, use the 'subs' command.

Here's an example showing how to extract the coefficient c[4] for the case s[3] := 1 / s[1];

> subs(series_op(1 / s[1]) , c[4]);

$$-a_4 + 2 a_1 a_3 + a_2^2 - 3 a_2 a_1^2 + a_1^4$$