Gerdt 4

`gerdt4`

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Variables: x ; y ; z ; t ; u ; v ; w ; a ; b ; c

Equations:

$yt - yu - ub + uc$;

$2xy^2t - xy^2u - 2y^2tv + y^2uv - xyza + 12xt^2a - 4xtua - xu^2a + yzva - 2tuva + u^2va - xuwa + uvwa - 6xzab$;

$xy^2z - y^2zv + 6xzta + xzua - zuva - 2xyzb + 2yzvb - 2xuwb + 2uvwb - 12xzb^2 + xyzc - yzvc + xuwc - uvwc + 6xzbc$;

$xyu - yuv + 3xza + 3xtb + xub - uvb$;

$5x^2yt - 5x^2yu - 10xytv + 10xyuv + 5ytv^2 - 5yuv^2 - 6x^2za - 12xzva + 4x^2tb - 7x^2ub + 16xtvb + 8xuvb - 2tv^2b - uv^2b + 8x^2tc + x^2uc - 10xtvc - 2xuvc + 2tv^2c + uv^2c$;

$-9x^4tvc + 9x^4uvc - 18x^3tv^2c - 9x^3uv^2c + 3x^4yt - 4x^4yu - 9x^3ytv + 10x^3yuv + 9x^2ytv^2 - 6x^2yuv^2 - 3xytv^3 - 2xyuv^3 + 2yuv^4 - 6x^4za - 45x^3zva - 27x^2zv^2a - 3xzv^3a - 6x^4tb - 2x^4ub - 45x^3tvb + 32x^3uvb - 27x^2tv^2b - 30x^2uv^2b - 3xtv^3b - xuv^3b + uv^4b$;

$wb - tc + uc - wc$;

$-6ztva + xzwa - zvwa - 2xw^2b + 2vw^2b + 12zvb^2 + xyzc - yzvc + xw^2c - vw^2c - 2xzbc - 4zvbc + xzc^2 - zvc^2$;

$-12t^2va + 6tuva + 2xtwa - xuwa - 2tvwa + uvwa - xw^2a + vw^2a + 6zvab + 2xytc - xyuc - 2ytvc + yuvc - xzac + zvac$;

$3zva + 3tvb - xtc + tvc - xwc + vwc$;

$-12xzva - 6zv^2a - 2x^2tb + 2x^2ub + 16xtvb - 10xuvb + 4tv^2b + 8uv^2b + 5x^2wb - 10xvwb + 5v^2wb - x^2tc + x^2uc + 8xtvc - 2xuvc - 7tv^2c + uv^2c - 5x^2wc + 10xvwc - 5v^2wc$;

$-18x^2uv^3b - 9xuv^4b - 9x^2uv^3c + 9xuv^4c - 3x^3zva - 27x^2zv^2a - 45xzv^3a - 6zv^4a - 3x^3tvb - 27x^2tv^2b - 45xtv^3b - 6tv^4b - 3x^3vwb + 9x^2v^2wb - 9xv^3wb + 3v^4wb + x^4tc - x^3tvc - 30x^2tv^2c + 32xtv^3c - 2tv^4c + 2x^4wc - 2x^3vwc - 6x^2v^2wc + 10xv^3wc - 4v^4wc$;

References

[1] D. Bini and B. Mourrain. Polynomials test suite. 1996.