

Calculates groebner basis of

- $x^3 + (-2)xy$
- $x^2y + (-2)y^2 + x$

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$$S(x^3 + (-2)xy, x^2y + (-2)y^2 + x) = (-1)x^2.$$

Not enough. Appends

- $(-1)x^2$

.

$$S(x^3 + (-2)xy, (-1)x^2) = (-2)xy.$$

$$S(x^2y + (-2)y^2 + x, (-1)x^2) = (-2)y^2 + x.$$

Not enough. Appends

- $(-2)xy$

.

$$S(x^3 + (-2)xy, (-2)xy) = 0.$$

$$S(x^2y + (-2)y^2 + x, (-2)xy) = (-2)y^2 + x.$$

$$S((-1)x^2, (-2)xy) = 0.$$

Not enough. Appends

- $(-2)y^2 + x$

.

$$S(x^3 + (-2)xy, (-2)y^2 + x) = 0.$$

$$S(x^2y + (-2)y^2 + x, (-2)y^2 + x) = 0.$$

$$S((-1)x^2, (-2)y^2 + x) = 0.$$

$$S((-2)xy, (-2)y^2 + x) = 0.$$

Enough for groebner basis. Result is

- $x^3 + (-2)xy$
 - $x^2y + (-2)y^2 + x$
 - $(-1)x^2$
 - $(-2)xy$
 - $(-2)y^2 + x$
- .