

# SpeL<sup>A</sup>T<sub>E</sub>X Example

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2011/04/12

## 1 Introduction ▷

This file is just a simple showcase of the features of SpeL<sup>A</sup>T<sub>E</sub>X. Below, you'll find examples of:

- a simple equation
- a more complex equation

## 2 A simple equation ▷

Consider the following simple definition of a polynomial function and check its spoken version by clicking on it.

$$f(x) = x^5 - x^4 + 7x^3 + 3x^2 - 8x + 23 \tag{1}$$

This seems a simple equation, however, it is not so straightforward for an automated reader, to read it correctly.

## 3 A more complex equation ▷

For a lightray that hits the parabola at the point  $P(t, 9 - \frac{t^2}{4})$ , the reflected ray has slope  $\tan 2\alpha$ . Since the slope of the tangent to the parabola at  $P$  is equal to  $\tan \alpha = -\frac{t}{2}$ , the equation of the reflected ray is given by

$$y - 9 + \frac{t^2}{4} = -\frac{4t}{4 - t^2} \cdot (x - t)$$

## 4 Een andere taal

▷

Sp<sup>e</sup>l<sup>A</sup>T<sub>E</sub>X is ook volledig babel-actief, wat wil zeggen dat de voorleesstem de geselecteerde taal zal volgen.

$$y - 9 + \frac{t^2}{4} = -(x - t) \cdot \frac{4t}{4 - t^2}$$

## 5 And some extras

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### 5.1 Citations

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Two excellent repositories are CPAN [2] and CTAN [1].

### 5.2 References to labels

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Section 2 contains an illustration of a simple equation. For a more complex equation, we refer the user to section 3.

## References

- [1] The Comprehensive T<sub>E</sub>X Archive Network. <http://www.ctan.org>. online, accessed in August 2021.
- [2] The Comprehensive Perl Archive Network. <http://www.cpan.org>. online, accessed in August 2021.