1 This is a test

Testing $(1-x-x^2)^3 = x^4 + 2\,x^3 - x^2 - 2\,x + 1$.

Using SageTEX, one can use Sage to compute things and put them into your LATEX document. For example, there are 5430752961260190450350730555619285 20 integer partitions of 1269. You don't need to compute the number yourself, or even cut and paste it from somewhere.

Here's some Sage code:

```
f(x) = exp(x) * sin(2*x)
```

The second derivative of f is

$$\frac{\mathrm{d}^2}{\mathrm{d}x^2} e^x \sin\left(2\,x\right) = -3\,e^x \sin\left(2\,x\right) + 4\,e^x \cos\left(2\,x\right).$$

Here's a plot of f from -1 to 1: