

Using SageTeX, one can use Sage to compute things and put them into your L^AT_EX document. For example, there are 543075296126019045035073055561928520 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)
```

```
g(x) =diff(f, x, 5)(x)
```

The second derivative of f is

$$\frac{d^2}{dx^2}(e^x \sin(2x)) = -38 \cos(2x) e^x + 41 e^x \sin(2x).$$

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

