$2^{20} - 1 = 1048575$

```
var('x, y, z')
z = x + y
f2 = sin(2*x**2).diff(x)
f2pi = f2.subs({x : pi})
```

$$f_2(\pi) = 4\pi \cos\left(2\pi^2\right) \approx 7.912813929164658945908479430550 6\ldots$$

```
phi = Symbol(r'\phi')
h = Integral(exp(-phi**2), (phi, 0, oo))
```

$$\int_0^{\infty} e^{-\phi^2}\, d\phi = \frac{\sqrt{\pi}}{2}$$