Contents

1 This is a test worksheet

Test Sage worksheet to LaTeX conversion.
Conversion script: sws2tex.py

$$\sum_{n=1}^{\infty} \frac{1}{n^2} = \frac{\pi^2}{6}$$

1.1 Python

Sage code

```
k = 0
for i in range(10):
    k += x^(-i)
show(k)
```

$$\frac{1}{x} + \frac{1}{x^2} + \frac{1}{x^3} + \frac{1}{x^4} + \frac{1}{x^5} + \frac{1}{x^6} + \frac{1}{x^7} + \frac{1}{x^8} + \frac{1}{x^9} + 1$$

1.2 LaTeX

Latex code

```
%latex
Some mathematics
\begin{enumerate}
\item $\displaystyle\sum_{n=1}^\infty \frac{1}{n^2} = \frac{\pi^2}{6}$
\item $1+1 = 2$
\end{enumerate}
```

1.3 Html

Html code

```
%html
<p>
Some <strong>Html</strong>
This is the <a href="www.sagemath.org">Sage Website</a>.
</p>
```

```
<html><font color='black'><p>
Some <strong>Html</strong>
This is the <a href="www.sagemat\
h.org">Sage Website</a>.
</p></font></html>
```

1.4 Plotting

Sage code

```
def b(n):
    return lambda x: bessel_J(n, x) + 0.5*(n-1)

fill = dict([(i, [i+1]) for i in [0..3]])
p = plot([b(c) for c in [1..5]], 0, 40, fill = fill)
# We save as PDF to get a better quality image
# in the LaTeX version of the worksheet
p.show(filename = "sage0.pdf")
```