Step-by-step integration

This is another nice example drawn from the Pythontex gallery, see https://github.com/gpoore/pythontex.

It shows the step-by-step computations of a simple triple integral.

```
# Define limits of integration
x_max := 2:   y_max := 3:   z_max := 4:
x_min := 0:   y_min := 0:   z_min := 0:

ans := int(f(x,y,z), [x=x_min..x_max, y=y_min..y_max, z=z_min..z_max]):            # mpl(lhs.01,ans)

f := (x,y,z) -> x*y + y*sin(z) + cos(x+y):

ans := ''int''(''int''(''int''(f(x,y,z), x=x_min..x_max), y=y_min..y_max), z=z_min..z_max):    # mpl(rhs.01,ans)
ans := ''int''(''int''(int(f(x,y,z), x=x_min..x_max), y=y_min..y_max), z=z_min..z_max):        # mpl(rhs.02,ans)
ans := ''int''(int(int(f(x,y,z), x=x_min..x_max), y=y_min..y_max), z=z_min..z_max):            # mpl(rhs.03,ans)
ans := int(int(int(f(x,y,z), x=x_min..x_max), y=y_min..y_max), z=z_min..z_max):                # mpl(rhs.04,ans)

# And now, a numerical approximation
ans := evalf[15](ans):                                                            # mpl(rhs.05,ans)
```

$$
\begin{aligned}
\int_0^4 \int_0^3 \int_0^2 f(x,y,z)\,\mathrm{d}x\,\mathrm{d}y\,\mathrm{d}z &= \int_0^4 \int_0^3 \int_0^2 xy + y\sin(z) + \cos(x+y)\,\mathrm{d}x\,\mathrm{d}y\,\mathrm{d}z \\
&= \int_0^4 \int_0^3 -\sin(y) + 2\,y + 2\,y\sin(z) + \sin(2+y)\,\mathrm{d}y\,\mathrm{d}z \\
&= \int_0^4 8 + \cos(2) + 9\,\sin(z) + \cos(3) - \cos(5)\,\mathrm{d}z \\
&= 41 - 9\,\cos(4) + 4\,\cos(3) - 4\,\cos(5) + 4\,\cos(2) \\
&\approx 40.1235865133292
\end{aligned}
$$

```
\begin{align*}
   \mpl{lhs.01} &= \mpl{rhs.01}\\
                &= \mpl{rhs.02}\\
                &= \mpl{rhs.03}\\
                &= \mpl{rhs.04}\\
                &\approx \mpl{rhs.05}
\end{align*}
```