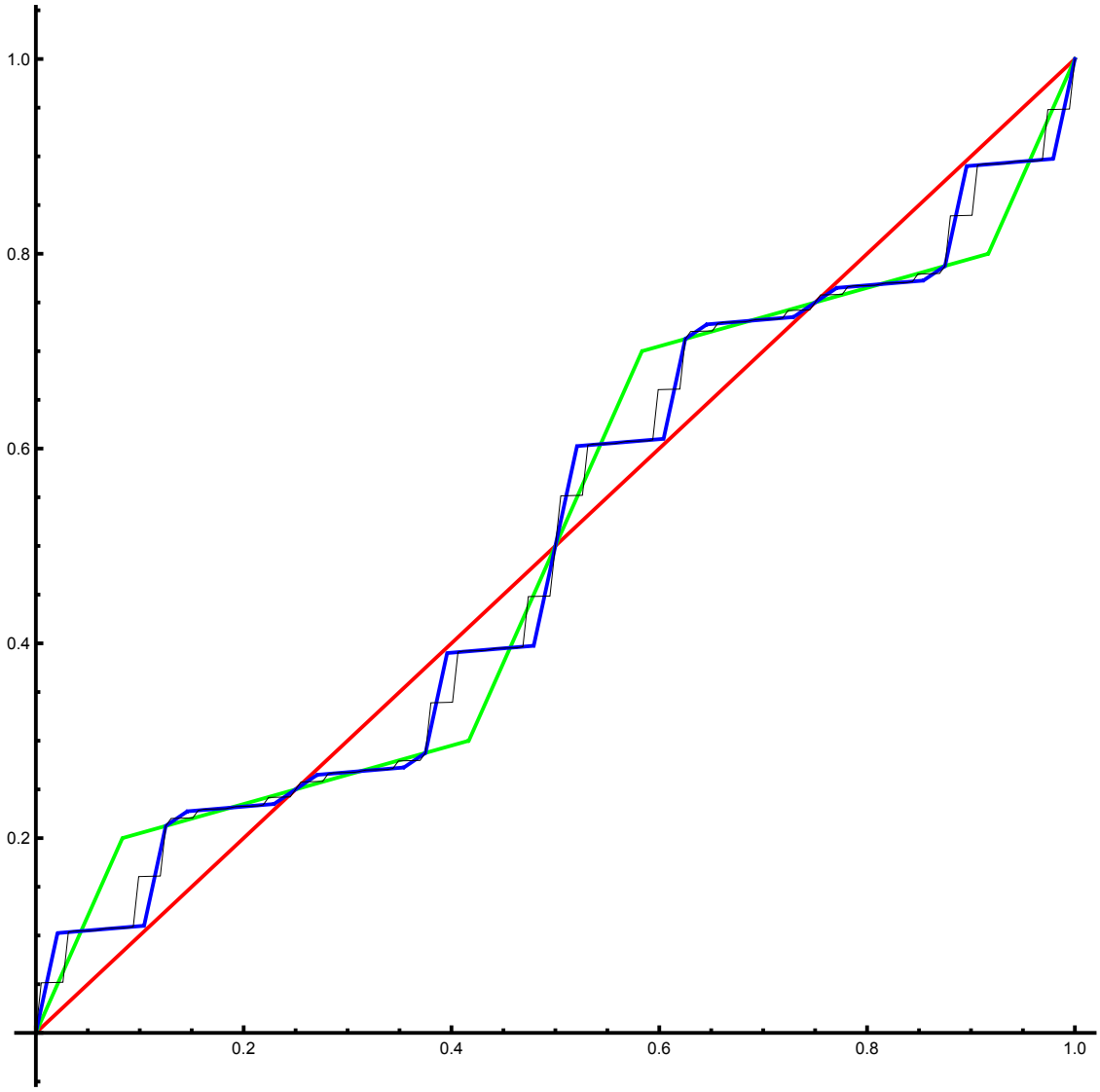
Hilbert's 13th Problem

Pensieve Header: Hilbert's 13th problem - Step 2 to level 3.

```
SetDirectory["C:/drorbn/AcademicPensieve/2014-11/H13/"];
<< "../../2009-11/Hilbert13th-Program.m"
```

```
ϕ1 := Phi[Identity, 2, 0.3, 2 / 3];
ϕ2 := Phi[ϕ1, 8, 0.3^2, 2 / 3];
ϕ3 := Phi[ϕ2, 32, 0.3^3, 2 / 3];
Step2phis = Plot[{x, ϕ1[x], ϕ2[x], ϕ3[x]}, {x, 0, 1},
  PlotPoints → 1279, ColorFunction → Automatic,
  AxesStyle → Thick, PlotStyle → {Directive[Red, Thick],
    Directive[Green, Thick], Directive[Blue, Thick], Directive[Black, Thin]}
 ]
```



```
Timing[
 Step3Cascade = Rasterize[
   Plot3D[ϕ3[x] + λ * ϕ3[y], {x, 0, 1}, {y, 0, 1},
    PlotPoints → 1279, Mesh → 95, ViewPoint → {-2, -2, 1},
    NormalsFunction → None, Boxed → False, Axes → None
   ]
  ]
]
```