Eli — PS 5 — 2025-02-04

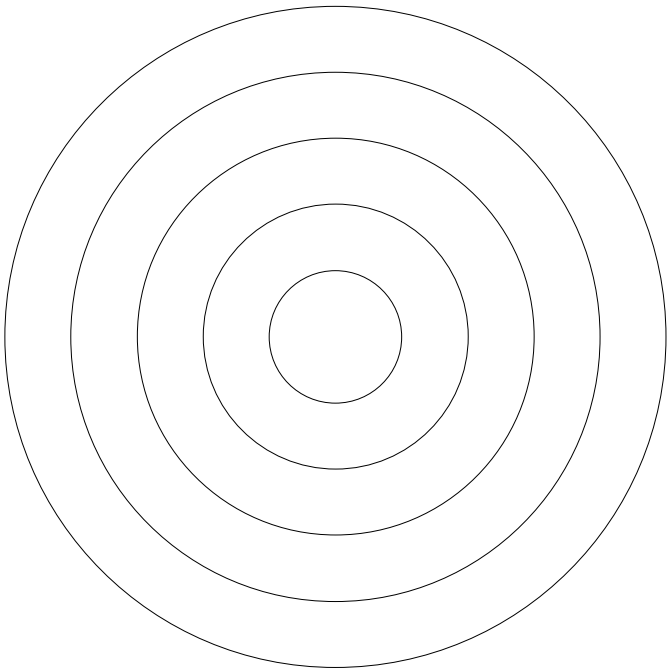
EIWL3 Sections 14 and 17

Chapter 14

In[320]:=

```
Graphics[Table[Circle[{0, 0}, r], {r, 1, 5}]]
```

Out[320]=



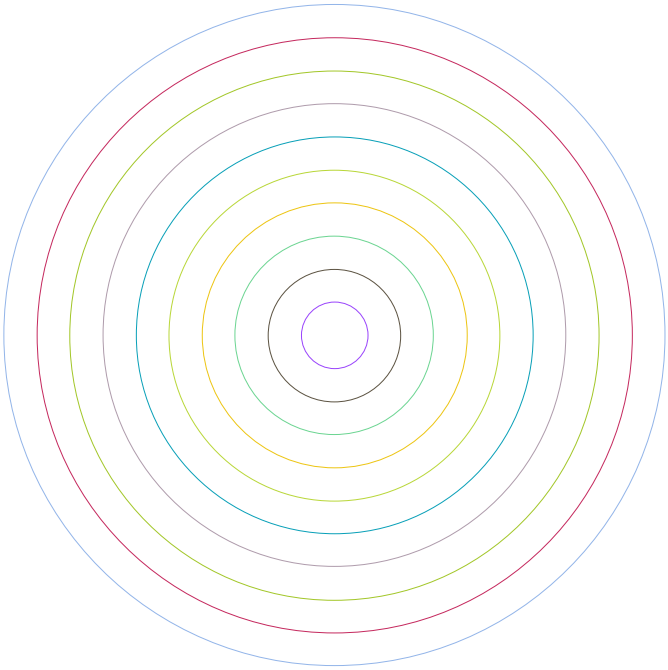
Looks great!

8/8

A few comments (none particularly significant) on the following pages, e.g., p. 6.

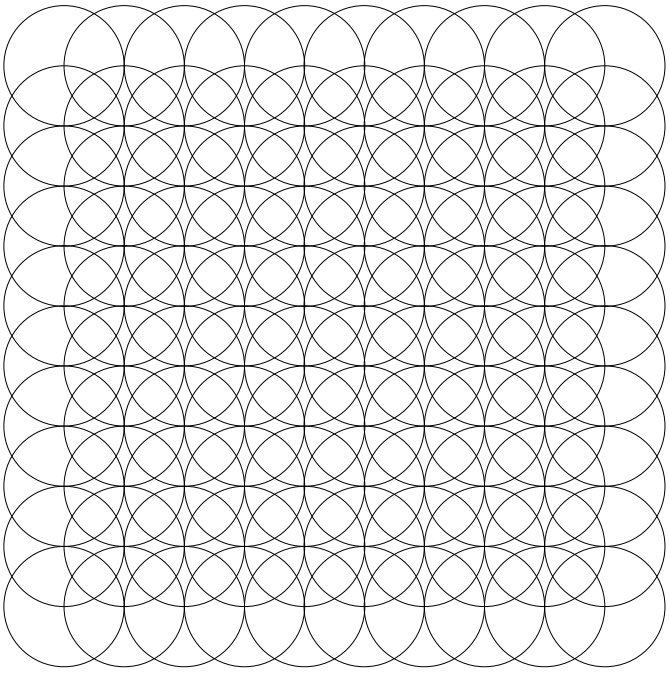
In[321]:=
```
Graphics[Table[Style[Circle[{0, 0}, r], RandomColor[]], {r, 1, 10}]]
```

Out[321]=



In[322]:=
```
Graphics[Table[Circle[{x, y}, 1], {x, 1, 10}, {y, 1, 10}]]
```

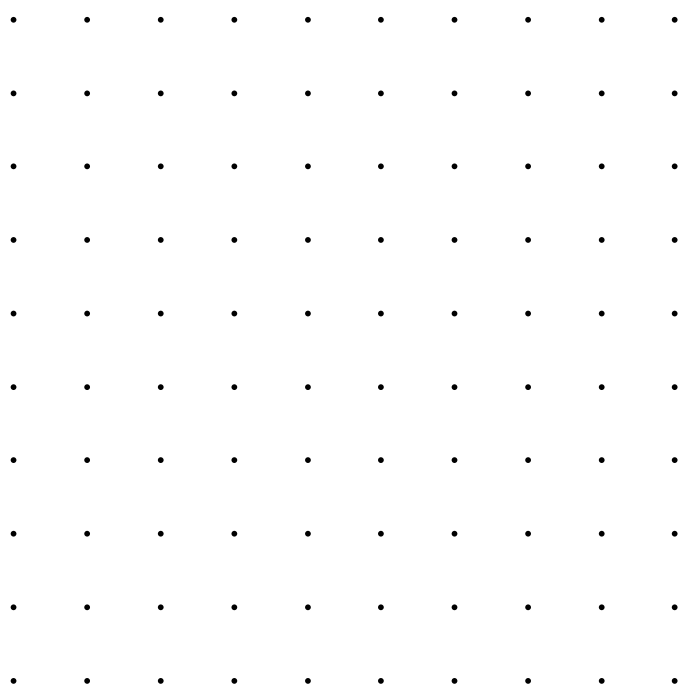
Out[322]=



In[323]:=

```
Graphics[Table[Point[{x, y}], {x, 1, 10}, {y, 1, 10}]]
```

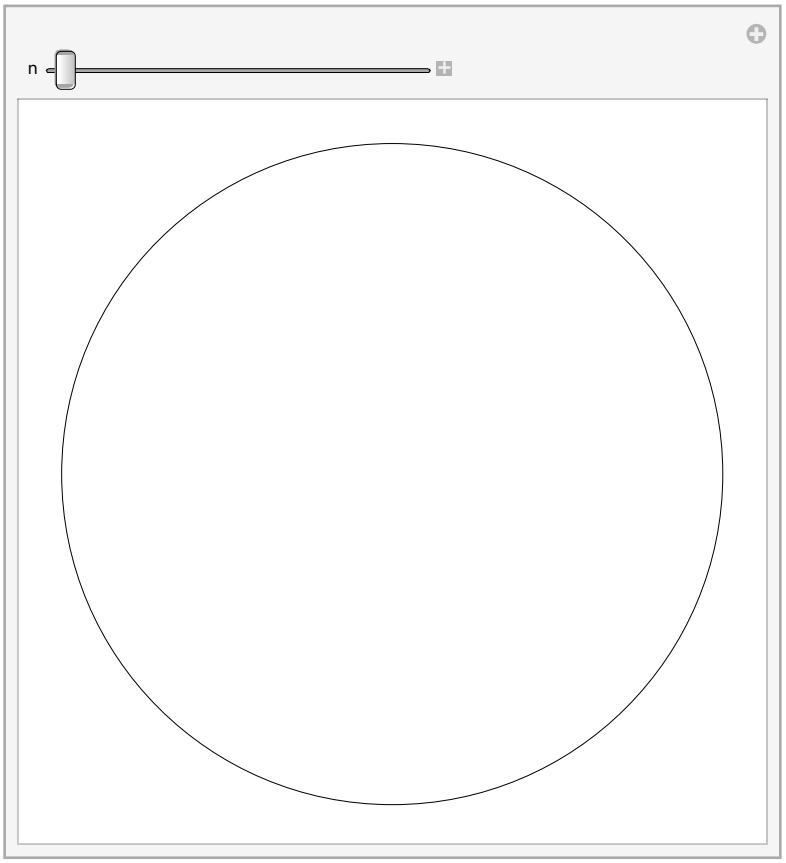
Out[323]=



In[324]:=

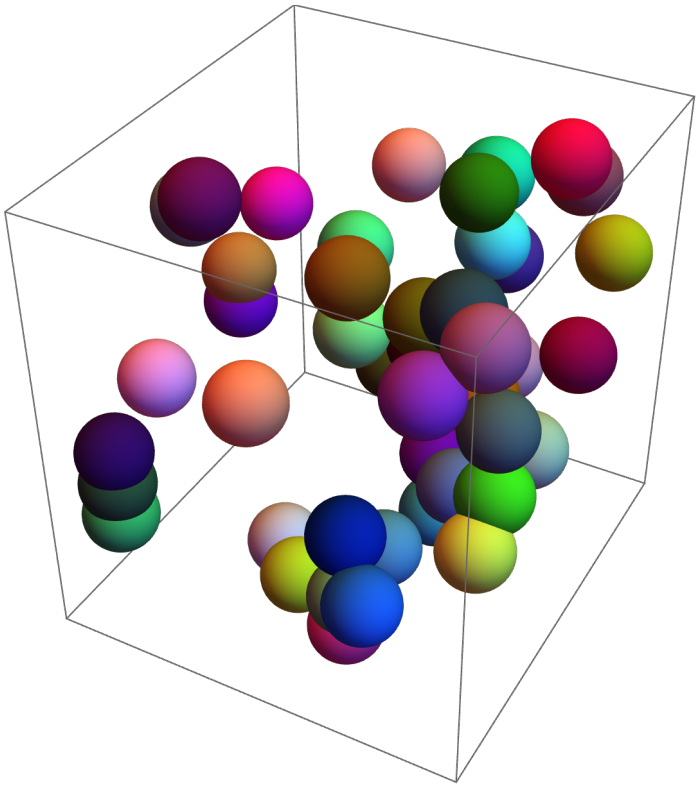
```
Manipulate[Graphics[Table[Circle[{0, 0}, r], {r, 1, n}]], {n, 1, 20, 1}]
```

Out[324]=



In[325]:=
```
Graphics3D[Table[Style[Sphere[{RandomInteger[10, 3]}, 1], RandomColor[]], 50]]
```

Out[325]=



In[326]:=
```
Show[%827, Axes → True, AxesStyle → Black]
```

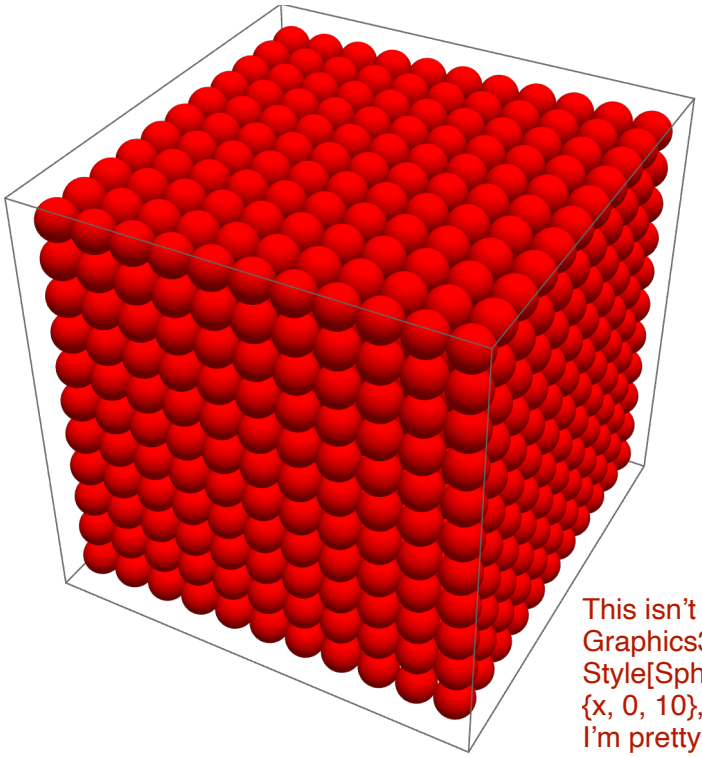
Show: Out is not a type of graphics.

Out[326]=
```
Show[%827, Axes → True, AxesStyle → ■]
```

Of course, these errors happened because I re-executed your notebook and the output numbers changed.

In[327]:=
```
Graphics3D[Table[Style[Sphere[{x, y, z}], Hue[n]],
  {x, 1, 22, 2}, {y, 1, 22, 2}, {z, 1, 22, 2}, {n, 0, 1}]]
```

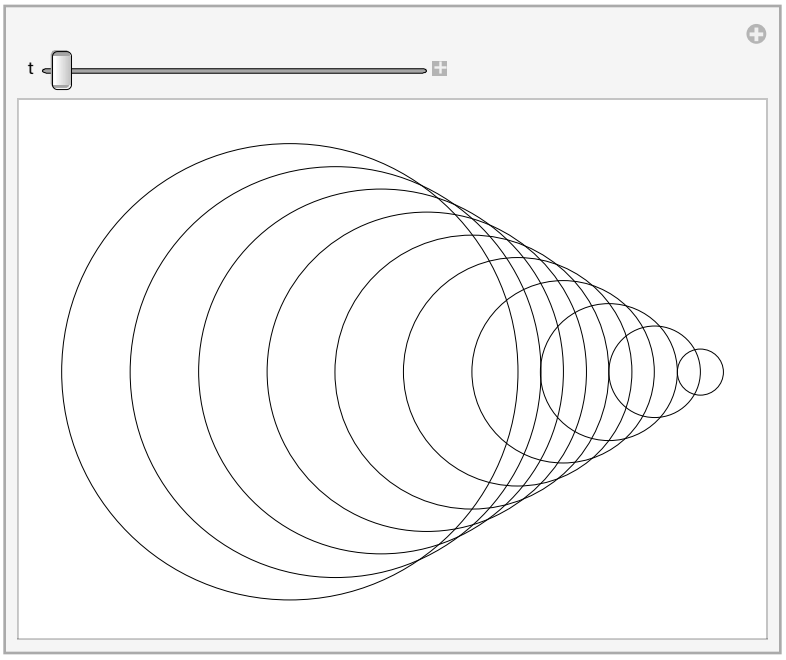
Out[327]=



This isn't what he was looking for. I did
Graphics3D[Table[
Style[Sphere[{x, y, z}, 1 / 2], RGBColor[x / 10, y / 10, z / 10]],
{x, 0, 10}, {y, 0, 10}, {z, 0, 10}]].
I'm pretty sure that was what Wolfram wanted.

In[328]:=
```
Manipulate[Graphics[Table[Circle[{t x, 0}, x], {x, 1, 10}]], {t, -2, 2}]
```

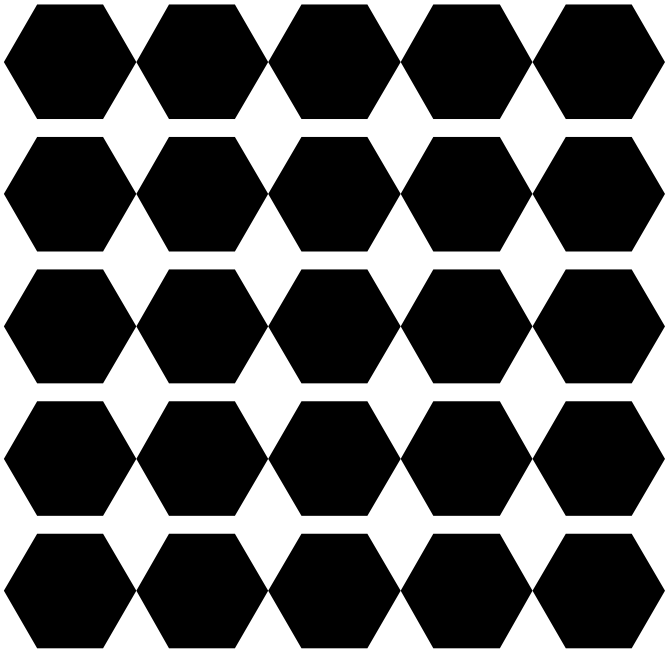
Out[328]=



In[329]:=

```
Graphics[Table[RegularPolygon[{x, y}, 0.5, 6], {x, 1, 5}, {y, 1, 5}]]
```

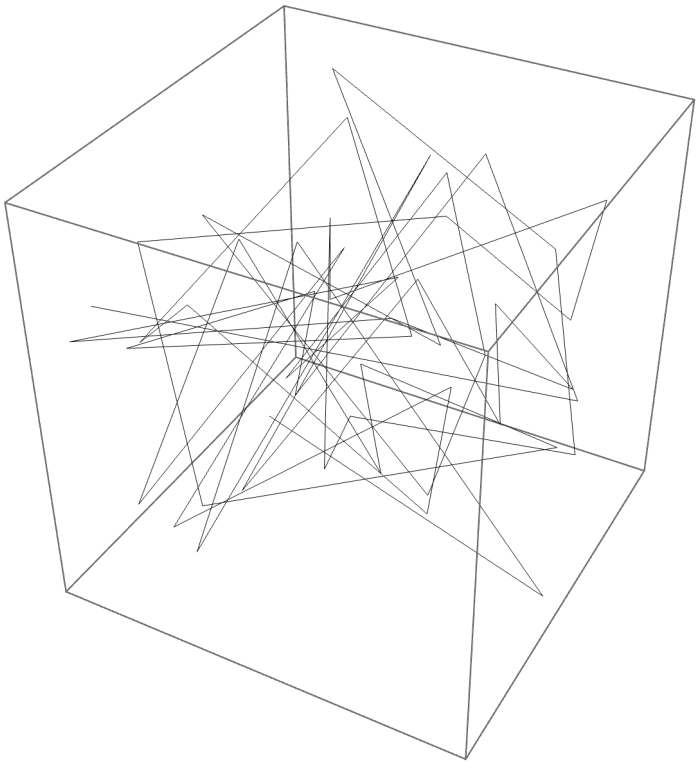
Out[329]=



In[330]:=

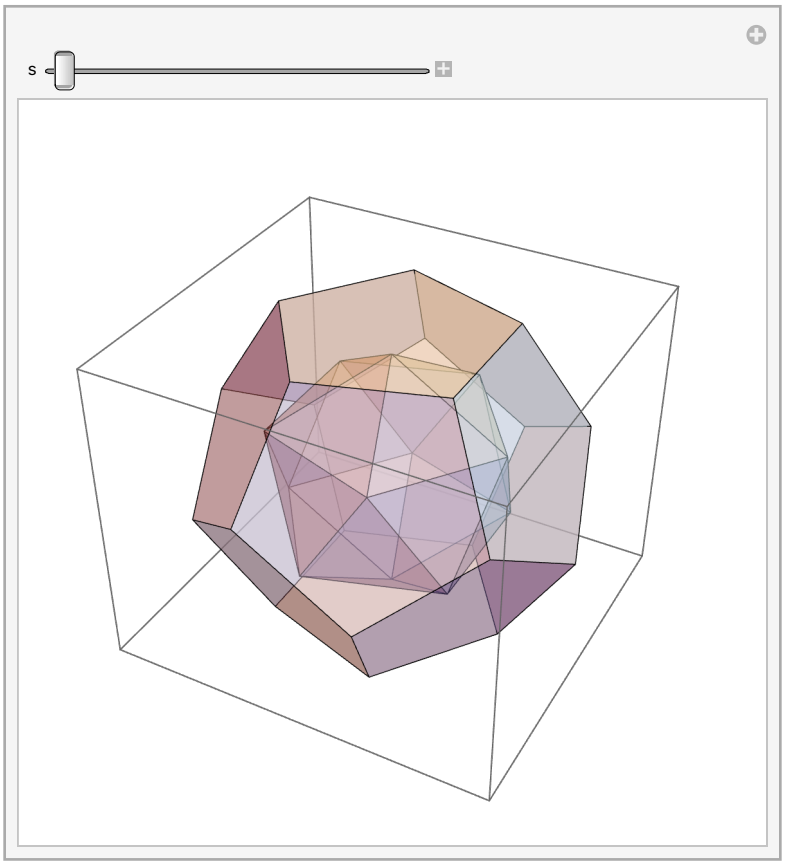
```
Graphics3D[Line[Table[RandomInteger[50, 3], 50]]]
```

Out[330]=



In[331]:=
```
Manipulate[Graphics3D[Style[
   {Icosahedron[{0, 0, 0}, s], Dodecahedron[{0, 0}, 1]}, Opacity[0.5]]], {s, 1, 2}]
```

Out[331]=



Chapter 17

```
UnitConvert[4.5 lb, "Kilograms"]
```

Out[332]=

2.04117 kg

```
UnitConvert[60.25 mi/h, "Kilometers/hour"]
```

Out[333]=

96.963 km/h

```
UnitConvert[Eiffel Tower BUILDING ["Height"], "Miles"]
```

Out[334]=

0.205052 mi

```
Mount Everest MOUNTAIN ["Elevation"] / Eiffel Tower BUILDING ["Height"]
```

Out[335]=

```
26.8147
```

```
Earth PLANET ["Mass"] / Moon PLANETARY MOON ["Mass"]
```

Out[336]=

```
81.3
```

```
CurrencyConvert[ ¥2500. , $ ]
```

Out[337]=

```
$16.44
```

```
UnitConvert[Plus[ 35 oz , 0.25 sh tn ,
  45 lb , 9 stone ], kg ]
```

Out[338]=

```
305.353 kg
```

```
UnitConvert[
 {Mars PLANET ["DistanceFromEarth"], Venus PLANET ["DistanceFromEarth"],
  Mercury PLANET ["DistanceFromEarth"], Jupiter PLANET ["DistanceFromEarth"],
  Saturn PLANET ["DistanceFromEarth"], Uranus PLANET ["DistanceFromEarth"],
  Neptune PLANET ["DistanceFromEarth"]}, light minutes ]
```

Out[339]=

```
{6.19673 light minutes , 3.66411 light minutes ,
 11.4198 light minutes , 39.2366 light minutes ,
 87.3811 light minutes , 162.484 light minutes , 255.37 light minutes }
```

In[340]:=

```
Rotate["hello", 180 Degree]
```

Out[340]=

```
ollǝɥ
```

In[341]:=

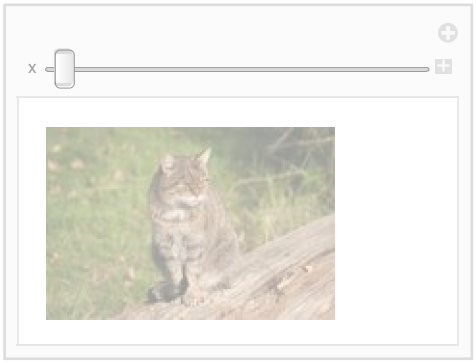
```
Table[Rotate["A", x Degree], {x, 0, 360, 30}]
```

Out[341]=

```
{A, ∀, ⅄, ᗡ, Ǝ, ᖵ, ⅁, H, I, ſ, ⋊, ⅂, A}
```

```
Manipulate[Rotate[domestic cat SPECIES SPECIFICATION ["Image"], x Degree], {x, 0, 180}]
```

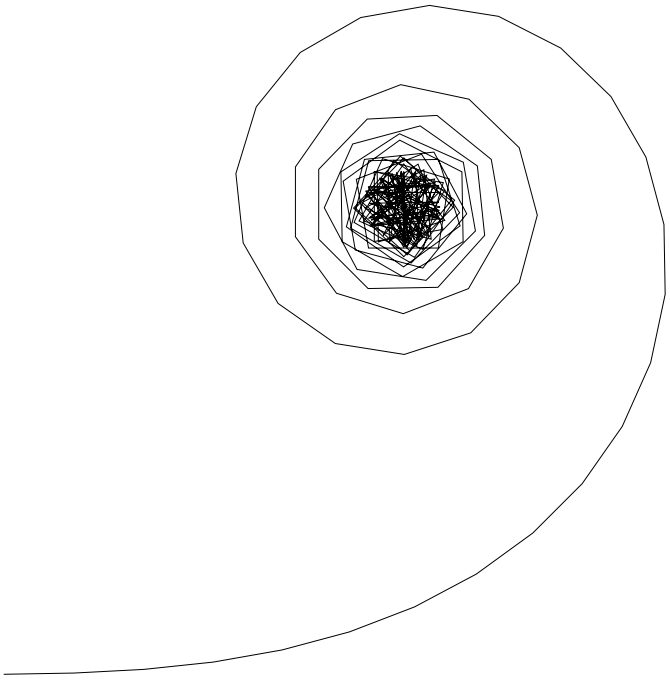
Out[342]=



In[343]:=

```
Graphics[Line[AnglePath[Range[180 ] Degree]]]
```

Out[343]=

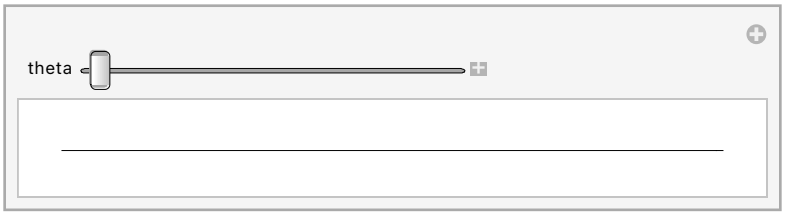


This one was cool!

In[344]:=

```
Manipulate[Graphics[Line[AnglePath[Table[theta, 100]]]], {theta, 0, 360}]
```

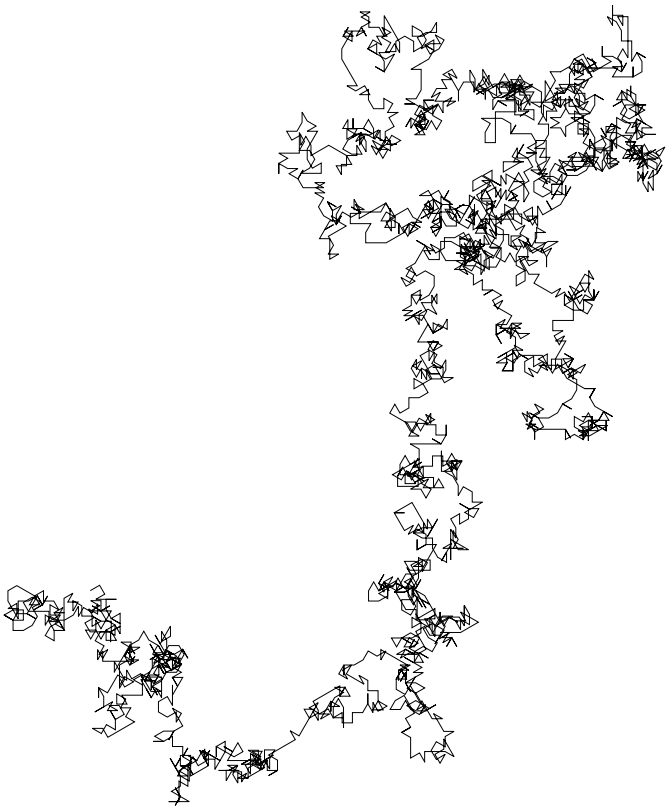
Out[344]=



In[345]:=

```
Graphics[Line[AnglePath[IntegerDigits[2^10000] 30 Degree]]]
```

Out[345]=



This one too!