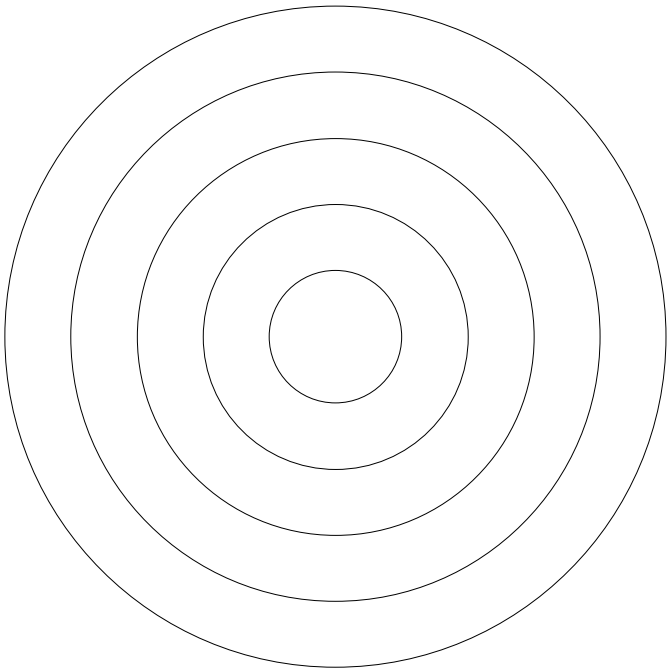
Jeremy — PS 5 — 2025-02-04

EIWL3 Sections 14 and 17

In[77]:=
```
Graphics[Table[Circle[{0, 0}, r], {r, 1, 5}]]
```

Out[77]=

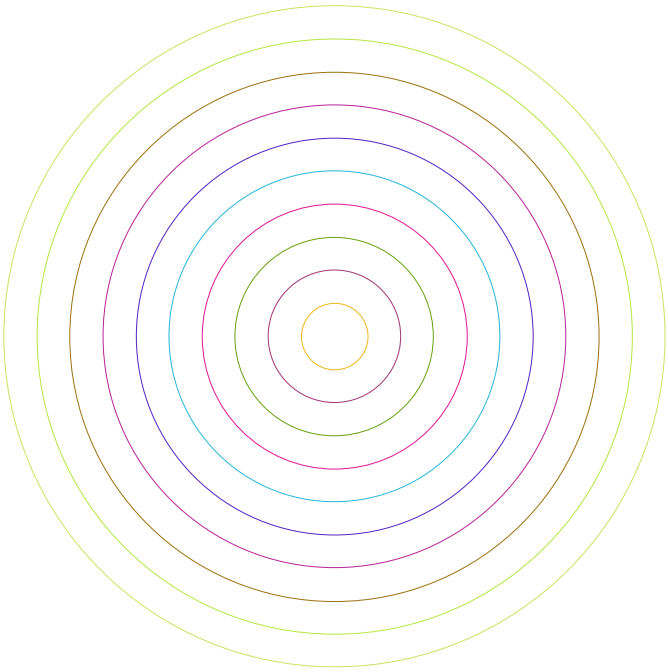


Perfect. Better than mine, actually. When I was grading, I discovered I had made a couple of mistakes.

8/8

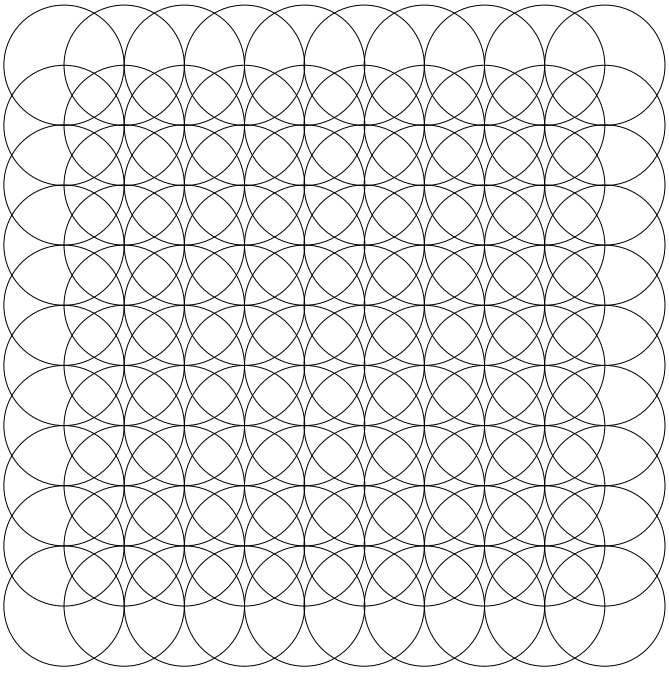
In[78]:=
```
Graphics[Table[Style[Circle[{0, 0}, r], RandomColor[]], {r, 10}]]
```

Out[78]=



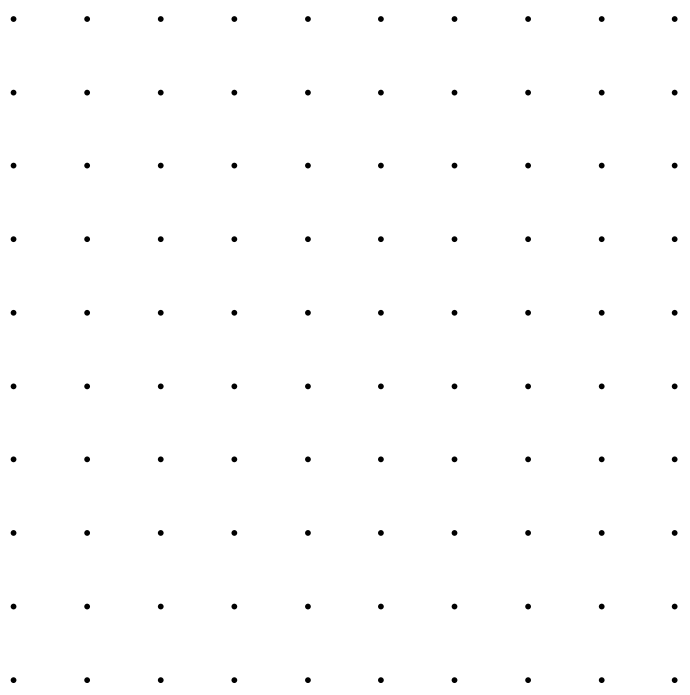
In[79]:=
```
Graphics[Table[Circle[{x, y}, 1], {x, 10}, {y, 10}]]
```

Out[79]=



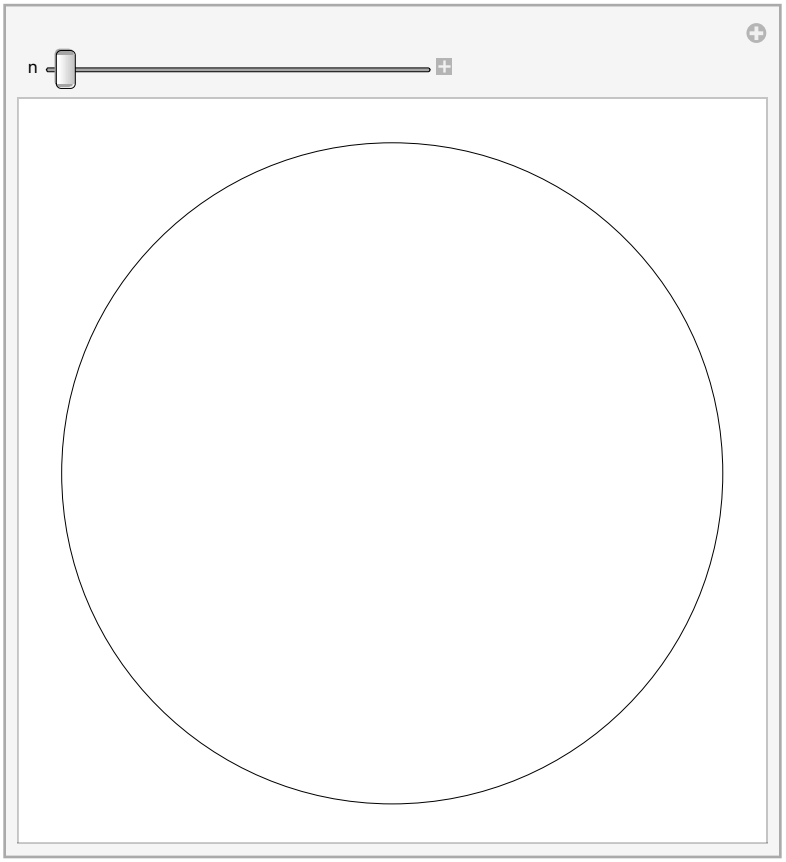
In[80]:=
```
Graphics[Table[Point[{x, y}], {x, 10}, {y, 10}]]
```

Out[80]=



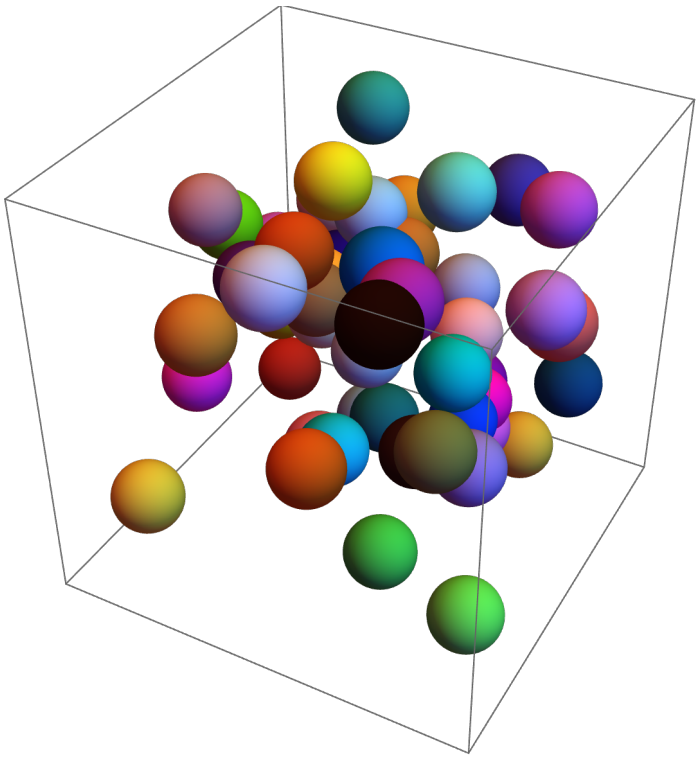
In[81]:=
```
Manipulate[Graphics[Table[Circle[{0, 0}, r], {r, n}]], {n, 1, 20}]
```

Out[81]=



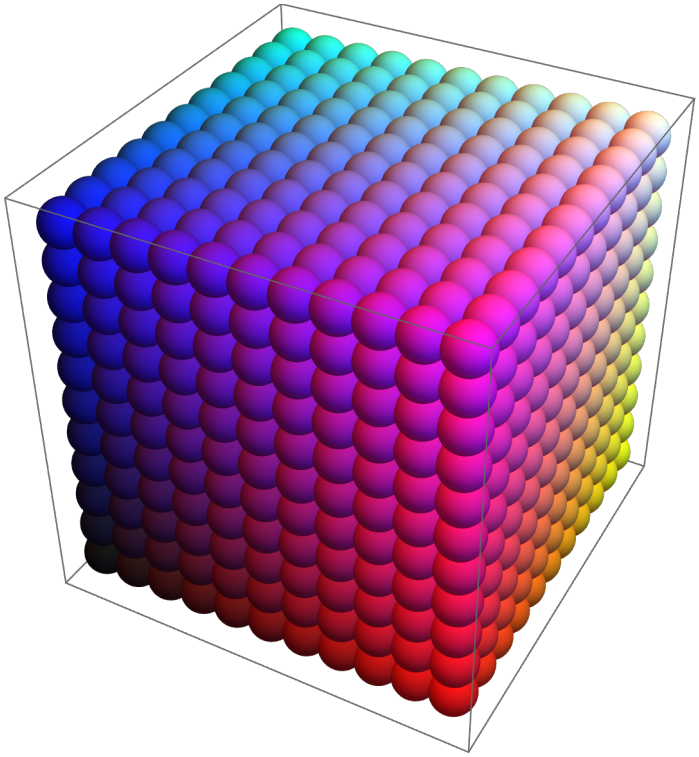
In[82]:=
```
Graphics3D[
 Table[Style[Sphere[{RandomInteger[10], RandomInteger[10], RandomInteger[10]}],
   RandomColor[]], 50]]
```

Out[82]=



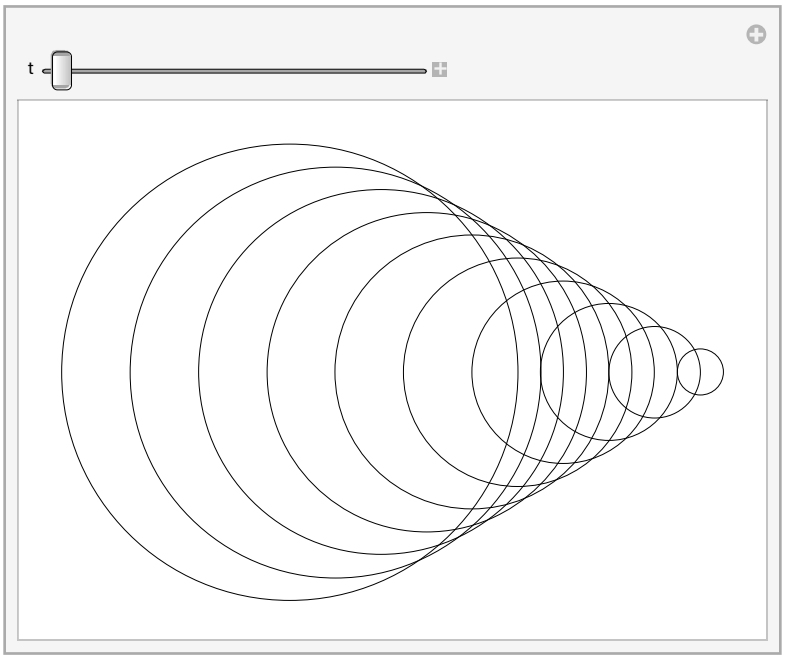
In[83]:=
```
Graphics3D[Table[Style[Sphere[{x, y, z}, 0.6], RGBColor[x / 11, y / 11, z / 11]],
  {x, 11}, {y, 11}, {z, 11}]]
```

Out[83]=



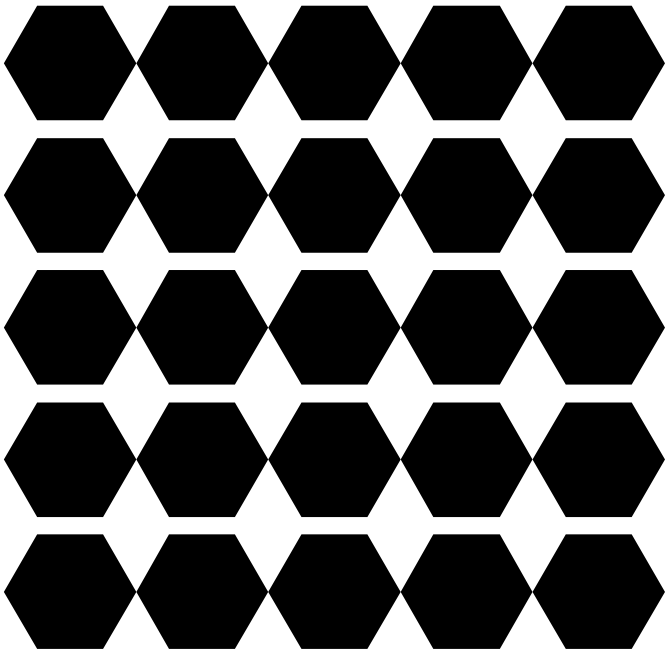
In[84]:=
```
Manipulate[Graphics[Table[Circle[{t * x, 0}, x], {x, 10}]], {t, -2, 2}]
```

Out[84]=



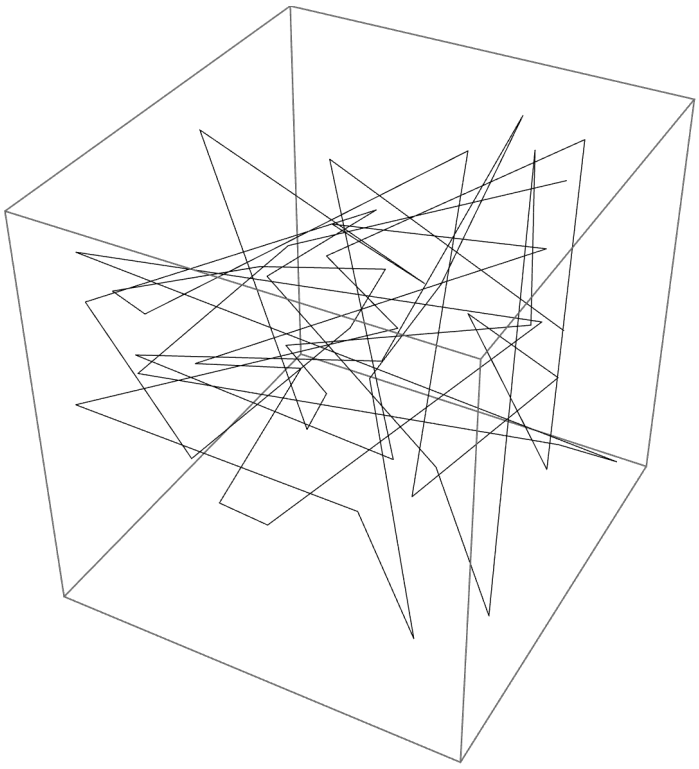
In[85]:=
```
Graphics[Table[RegularPolygon[{x, y}, 1 / 2, 6], {x, 5}, {y, 5}]]
```

Out[85]=



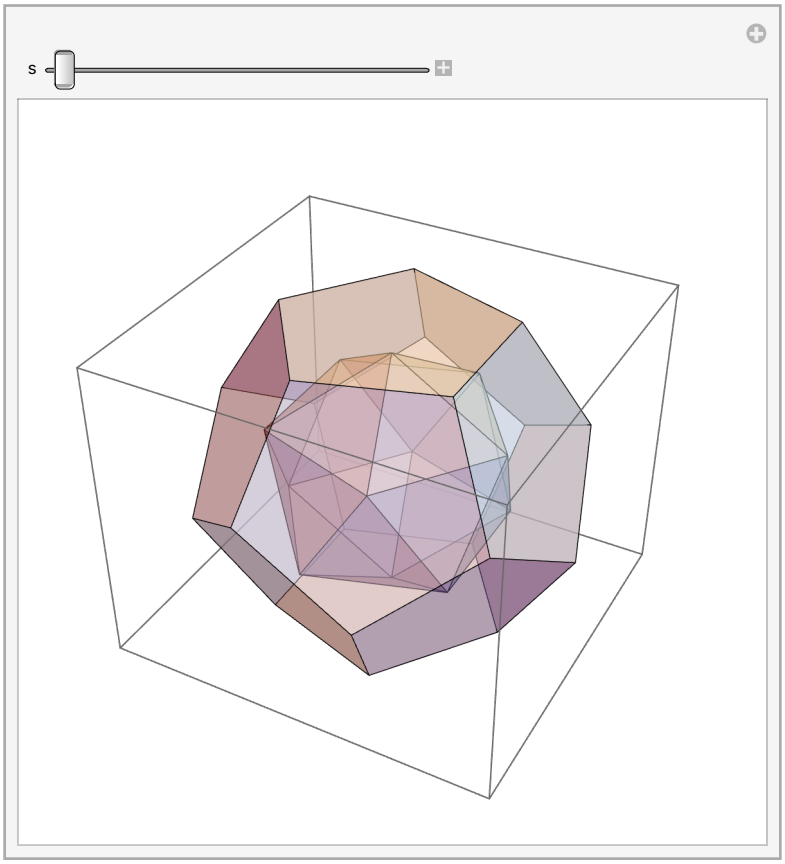
In[86]:=
```
Graphics3D[
 Line[Table[{RandomInteger[50], RandomInteger[50], RandomInteger[50]}, 50]]]
```

Out[86]=



In[87]:=
```
Manipulate[Graphics3D[{Style[Icosahedron[{0, 0, 0}, s], Opacity[0.5]],
    Style[Dodecahedron[{0, 0, 0}, 1], Opacity[0.5]]}], {s, 1, 2}]
```

Out[87]=



In[88]:=
```
UnitConvert[4.5 lb, "Kilograms"]
```

Out[88]=
```
2.04117 kg
```

In[89]:=
```
UnitConvert[60.25 mph, km/h]
```

Out[89]=
```
96.963 km/h
```

In[90]:=
```
UnitConvert[Eiffel Tower BUILDING ["Height"], "Miles"]
```

Out[90]=
```
0.205052 mi
```

In[91]:=
```
Mount Everest MOUNTAIN ["Elevation"] / Eiffel Tower BUILDING ["Height"]
```

Out[91]=
```
26.8147
```

In[92]:= Earth PLANET ["Mass"] / Moon PLANETARY MOON ["Mass"]

Out[92]= 81.3

In[93]:= CurrencyConvert[¥2500., "USDollars"]

Out[93]= $16.44

In[94]:= UnitConvert[
 35 oz + 0.25 sh tn + 45 lb + 9 stone, "Kilograms"]

Out[94]= 305.353 kg

In[95]:= UnitConvert[{Mercury PLANET ["DistanceFromEarth"],
 Venus PLANET ["DistanceFromEarth"], Earth PLANET ["DistanceFromEarth"],
 Mars PLANET ["DistanceFromEarth"], Jupiter PLANET ["DistanceFromEarth"],
 Saturn PLANET ["DistanceFromEarth"], Uranus PLANET ["DistanceFromEarth"],
 Neptune PLANET ["DistanceFromEarth"]}, "LightMinutes"]

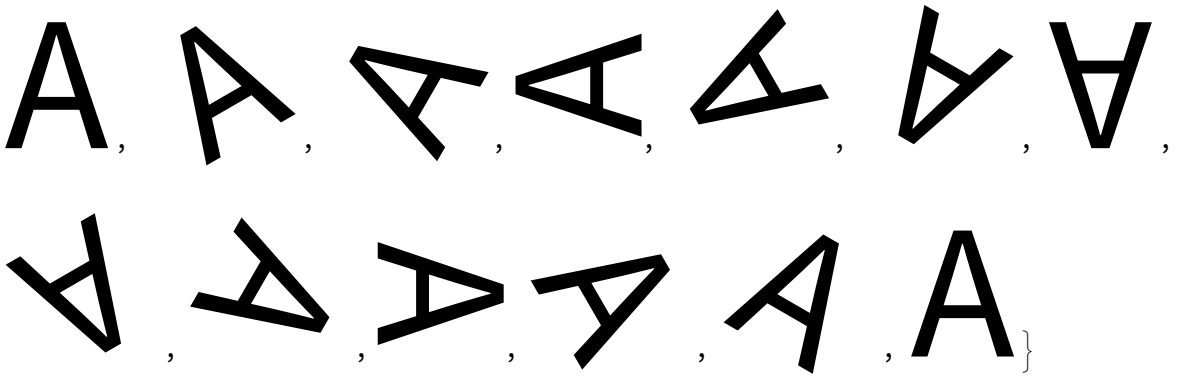
Out[95]= {11.4193 light minutes, 3.66369 light minutes,
 0. light minutes, 6.19712 light minutes, 39.2376 light minutes,
 87.3815 light minutes, 162.485 light minutes, 255.371 light minutes}

In[96]:= Rotate["hello", 180 Degree]

Out[96]= olleh

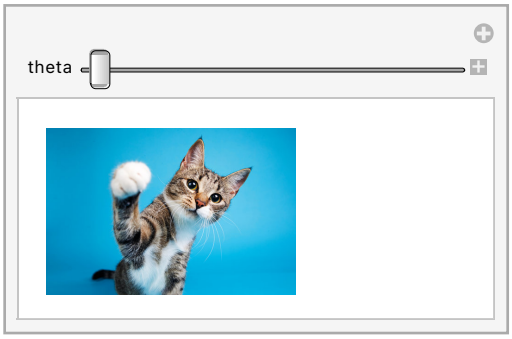
In[97]:= Table[Rotate[Style["A", 100], n Degree], {n, 0, 360, 30}]

Out[97]=



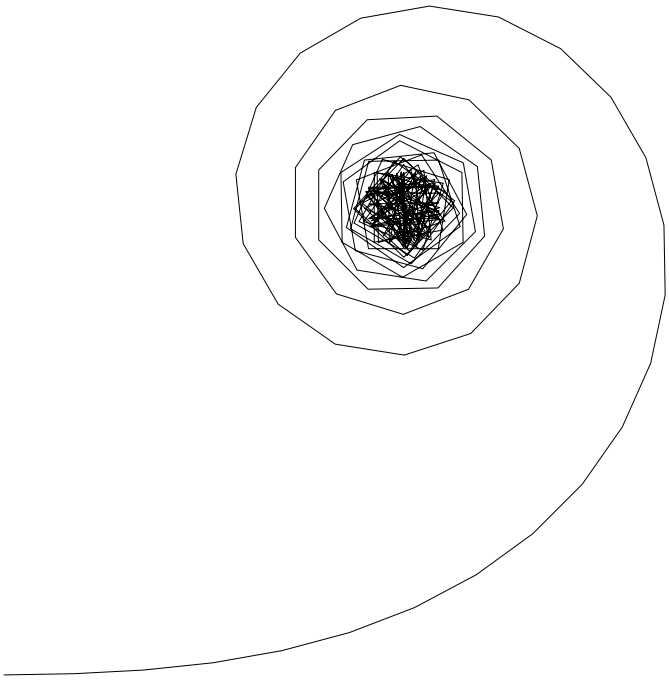
In[98]:=
```
Manipulate[Rotate[ , theta Degree], {theta, 0, 180}]
```

Out[98]=



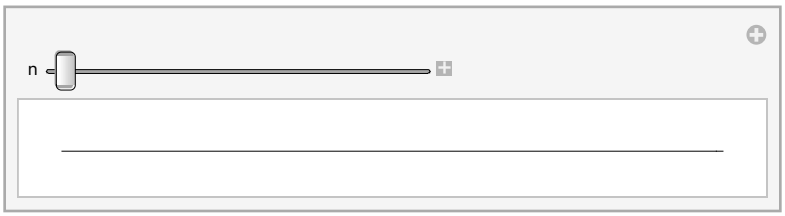
In[99]:=
```
Graphics[Line[AnglePath[Table[angle Degree, {angle, 180}]]]]
```

Out[99]=



In[100]:=
```
Manipulate[Graphics[Line[AnglePath[Table[n Degree, 100]]]], {n, 0, 360}]
```

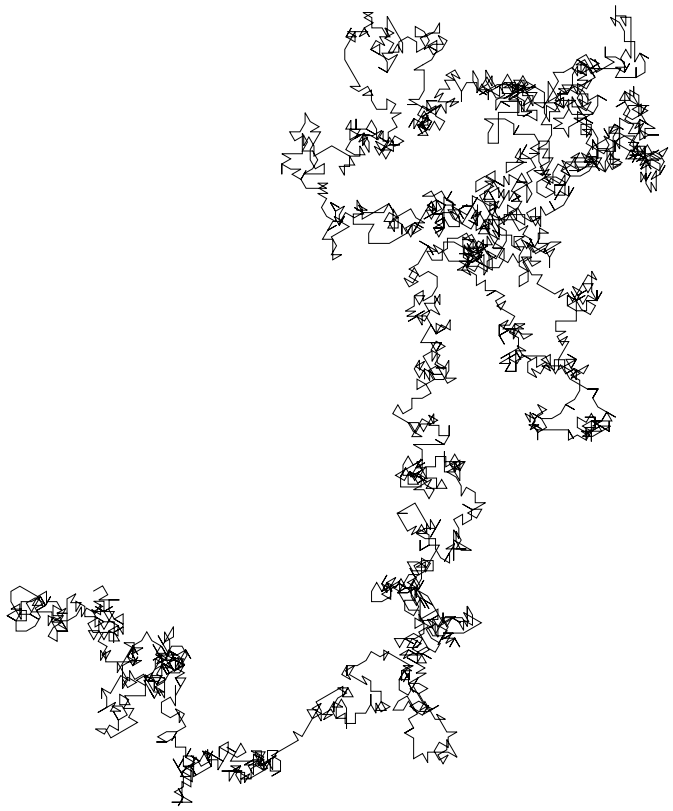
Out[100]=



In[101]:=

```
Graphics[Line[AnglePath[Table[Part[IntegerDigits[2^10000], n]*30 Degree,
    {n, Length[IntegerDigits[2^10000]]}]]]
```

Out[101]=



In[102]:=

In[103]:=

In[104]:=