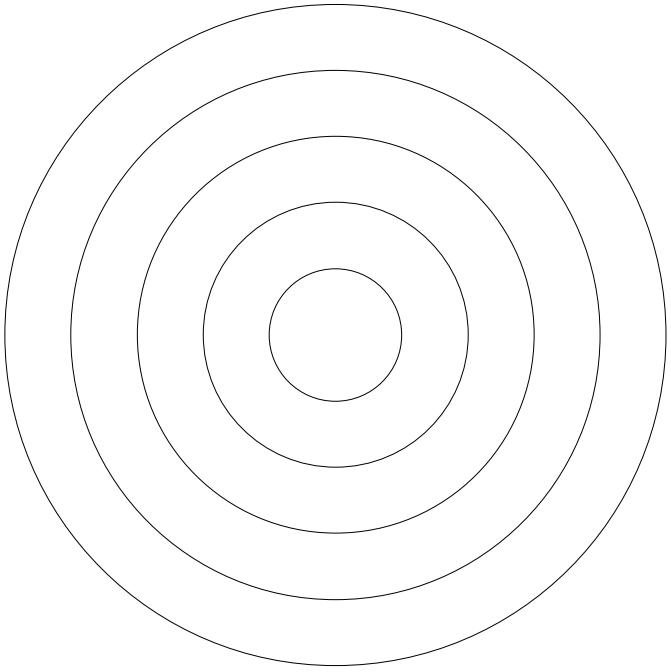
Walker — PS 5 — 2025-02-04

EIWL3 Sections 14 and 17

Section 14

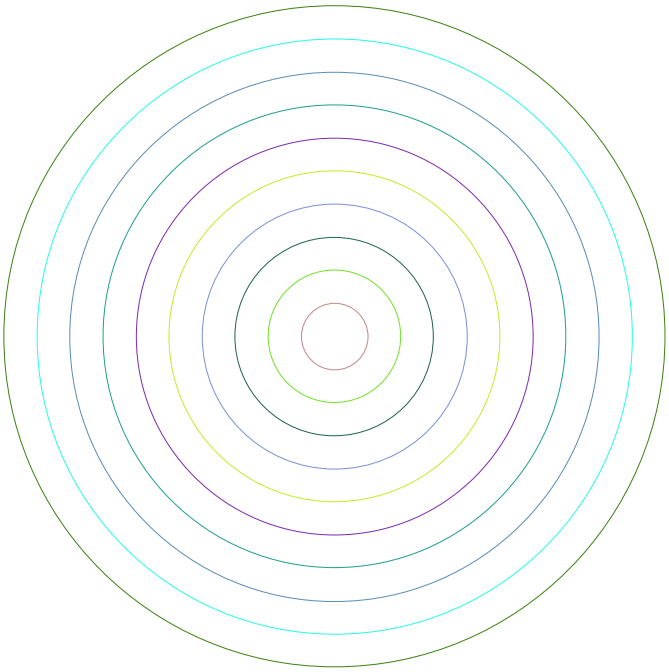
In[26]:=
```
Graphics[Table[Circle[{0, 0}, r], {r, 5}]]
```

Out[26]=



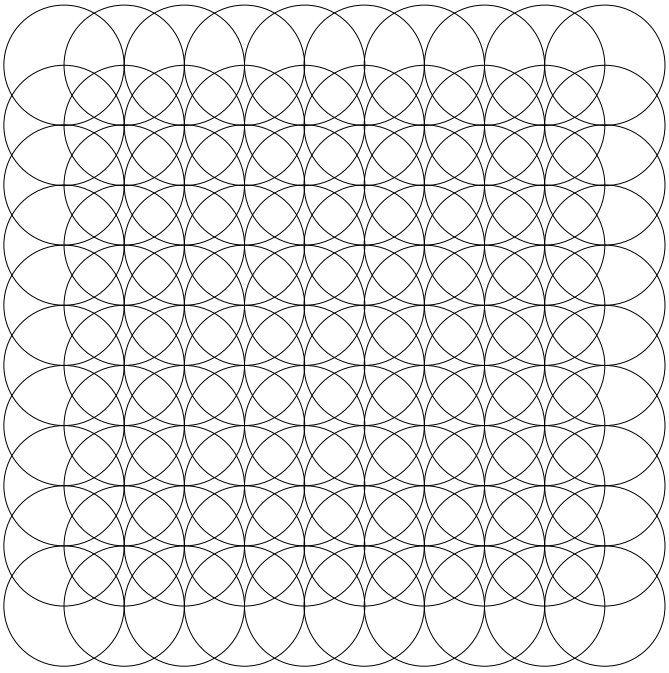
In[27]:=
```
Graphics[Table[Style[Circle[{0, 0}, r], RandomColor[]], {r, 10}]]
```

Out[27]=



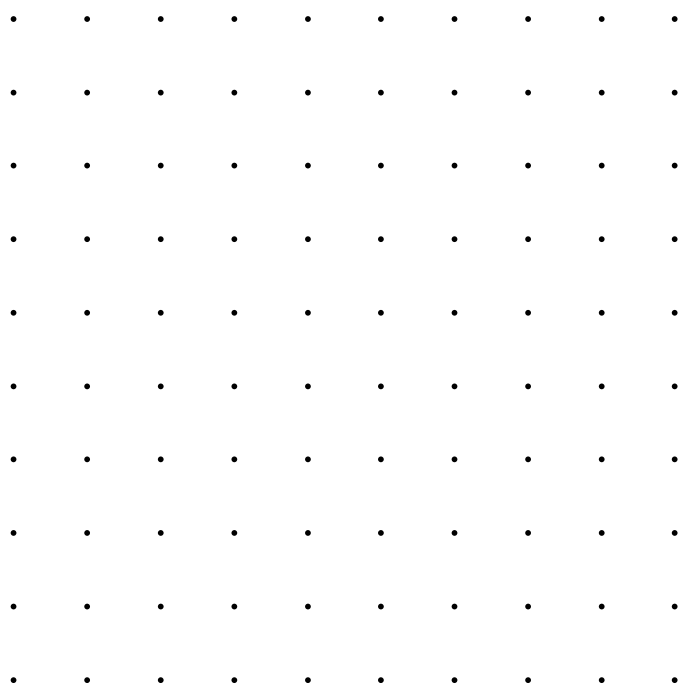
In[28]:=
```
Graphics[Table[Circle[{x, y}, 1], {x, 10}, {y, 10}]]
```

Out[28]=



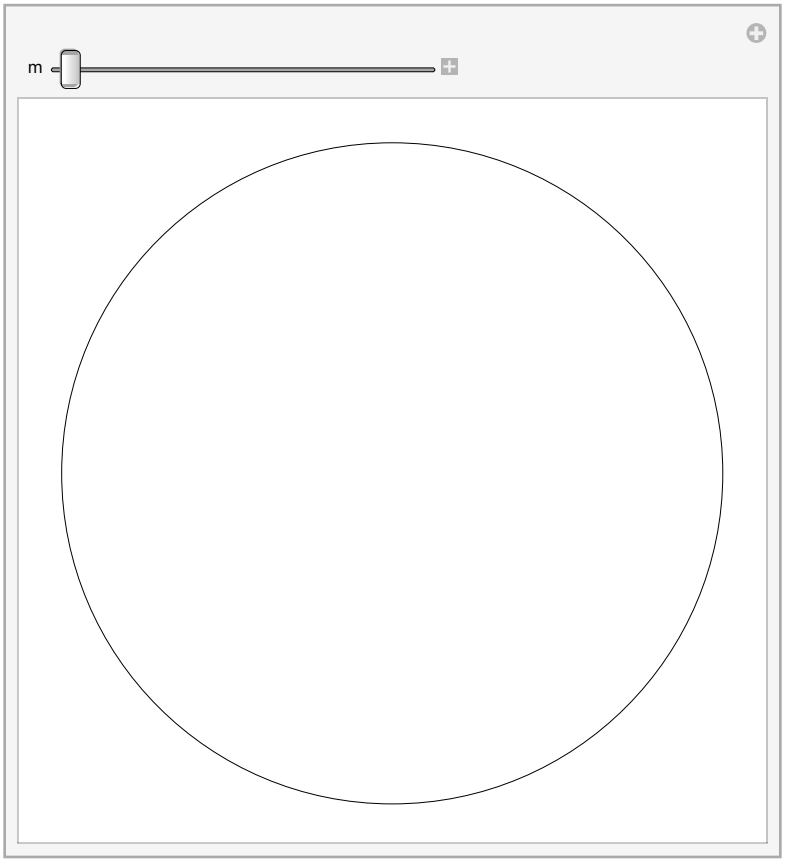
In[29]:=
```
Graphics[Table[Point[{x, y}], {x, 10}, {y, 10}]]
```

Out[29]=



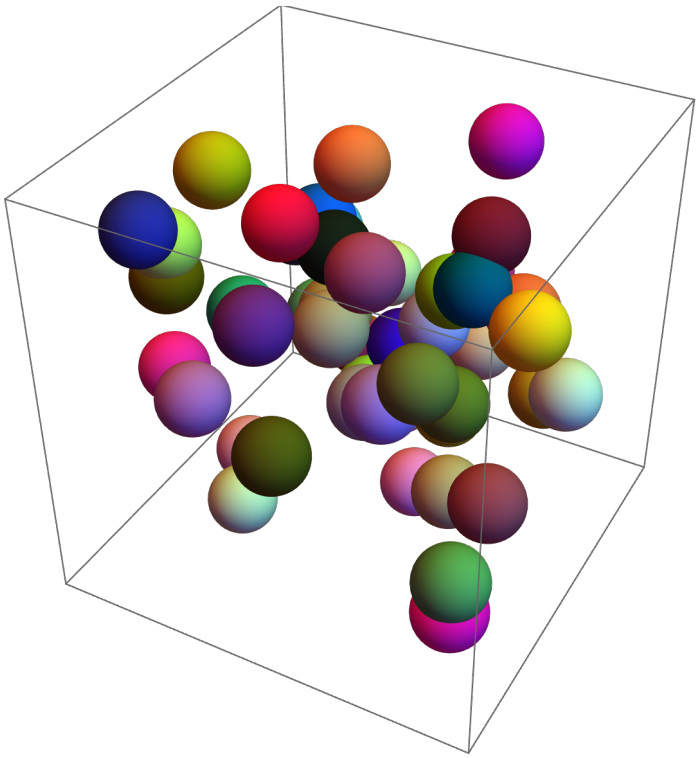
In[30]:=
```
Manipulate[Graphics[Table[Circle[{0, 0}, r], {r, m}]], {m, 1, 20, 1}]
```

Out[30]=



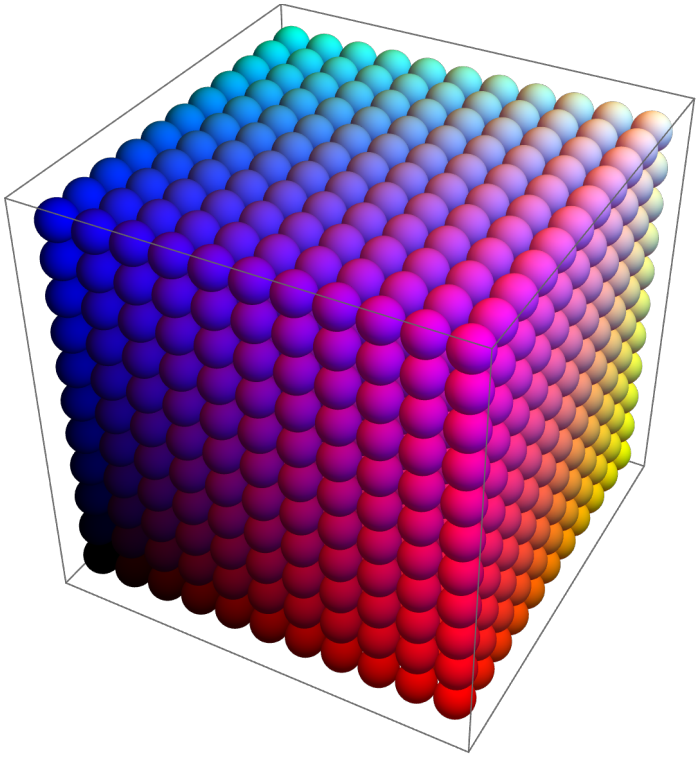
In[31]:=
```
Graphics3D[Table[Style[Sphere[RandomInteger[10, 3]], RandomColor[]], 50]]
```

Out[31]=



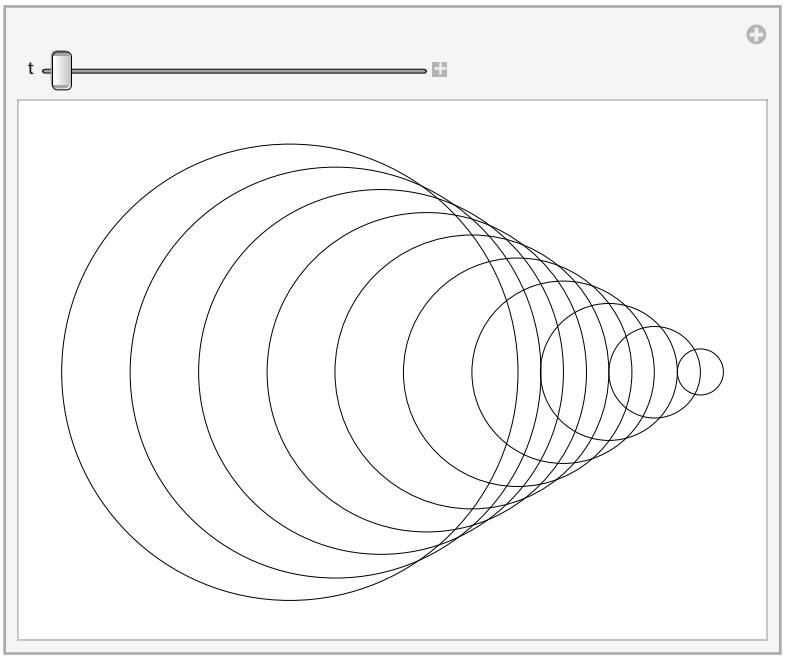
In[32]:=
```
Graphics3D[Table[Style[Sphere[{x, y, z}, 0.5], RGBColor[{x / 10, y / 10, z / 10}]],
  {x, 0, 10, 1}, {y, 0, 10, 1}, {z, 0, 10, 1}]]
```

Out[32]=



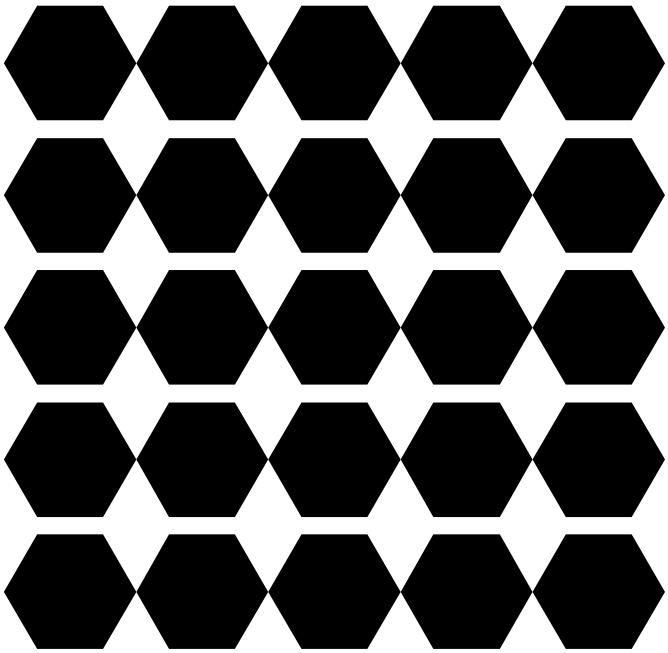
In[33]:=
```
Manipulate[Graphics[Table[Circle[{t * x, 0}, x], {x, 10}]], {t, -2, 2}]
```

Out[33]=



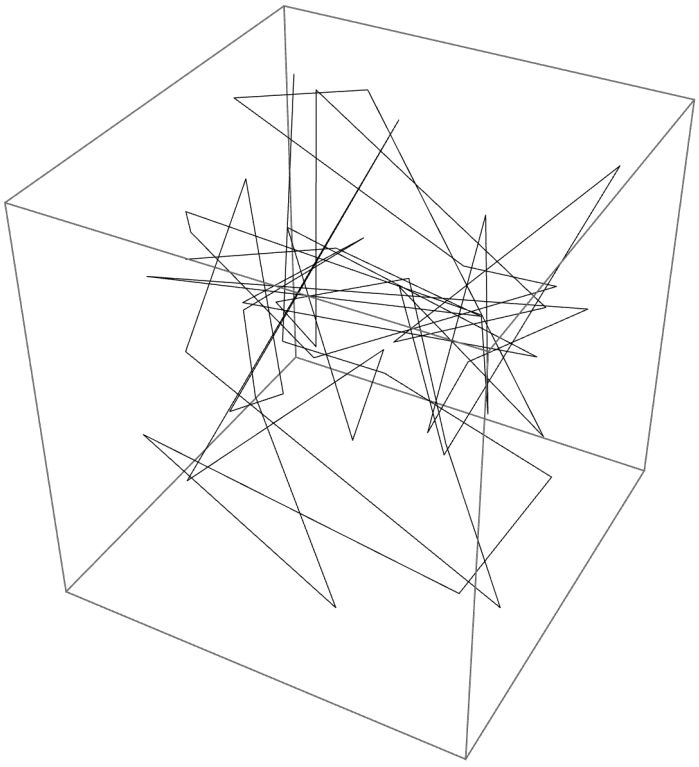
In[34]:=
```
Graphics[Table[RegularPolygon[{x, y}, 0.5, 6], {x, 1, 5, 1}, {y, 1, 5, 1}]]
```

Out[34]=



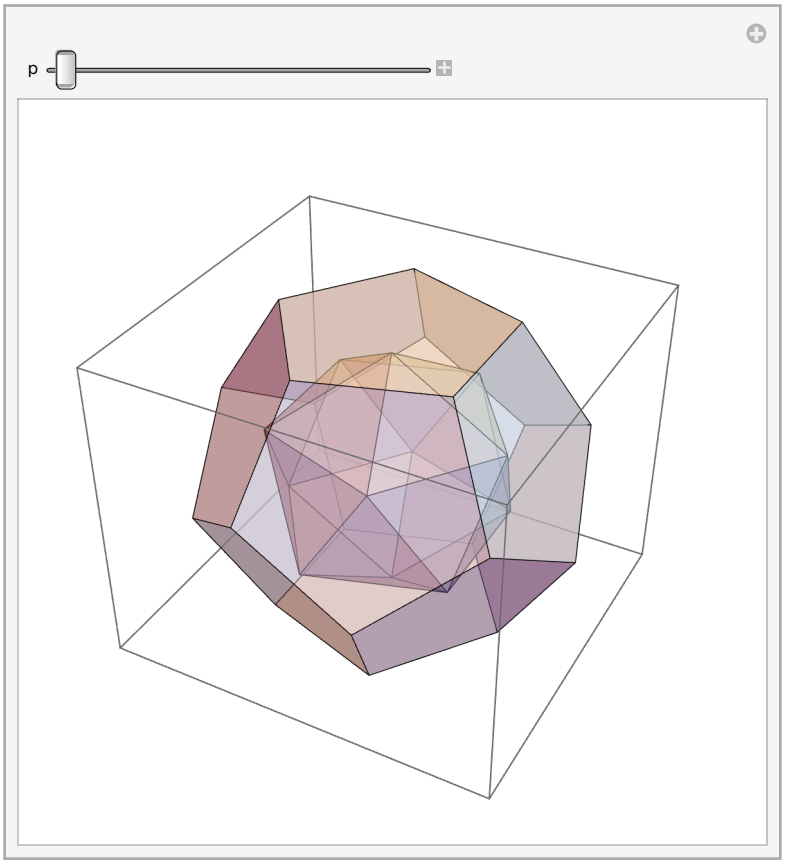
In[35]:=
```
Graphics3D[Line[Table[RandomInteger[50, 3], 50]]]
```

Out[35]=



In[36]:=
```
Manipulate[Graphics3D[{Style[Icosahedron[p], Opacity[0.5]],
    Style[Dodecahedron[1], Opacity[0.5]]}], {p, 1, 2}]
```

Out[36]=



Section17

```
UnitConvert[4.5 lb, kg]
```

Out[37]=

2.04117 kg

```
UnitConvert[60.25 mi/h, km/h]
```

Out[38]=

96.963 km/h

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

Out[39]=

0.205052 mi

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

Out[40]=

26.8147

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

Out[41]=

81.3

UnitConvert[¥2500., $]

Out[42]=

$16.44

UnitConvert[{35 oz, 0.25 sh tn, 45 lb}, kg]

Out[43]=

$\left\{\frac{317\,514\,659}{320\,000\,000}\ \text{kg},\ 226.796\ \text{kg},\ \frac{408\,233\,133}{20\,000\,000}\ \text{kg}\right\}$

```
UnitConvert[
 EntityValue[EntityList["Planet"], "DistanceFromEarth"], light minutes]
```

Out[44]=

{11.4194 light minutes, 3.66378 light minutes,
 0. light minutes, 6.19703 light minutes, 39.2374 light minutes,
 87.3814 light minutes, 162.485 light minutes, 255.37 light minutes}

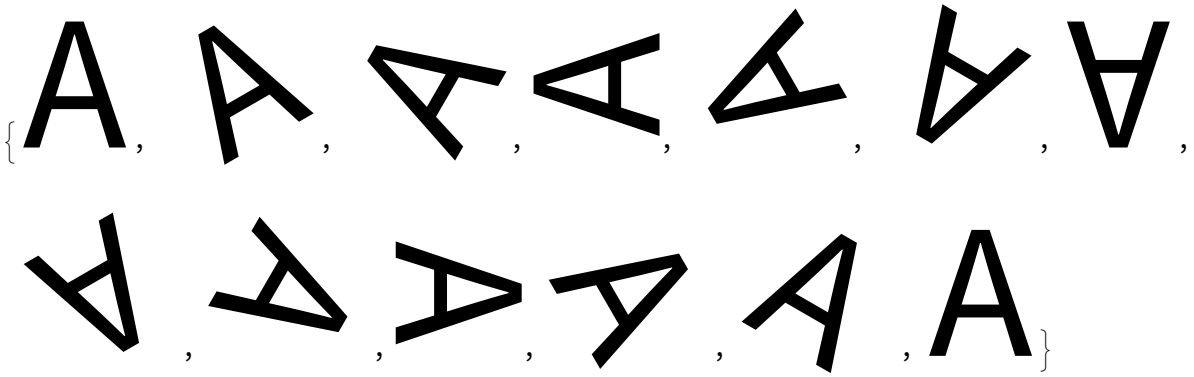
In[45]:=
```
Rotate["hello", 180 Degree]
```

Out[45]=

ollǝɥ

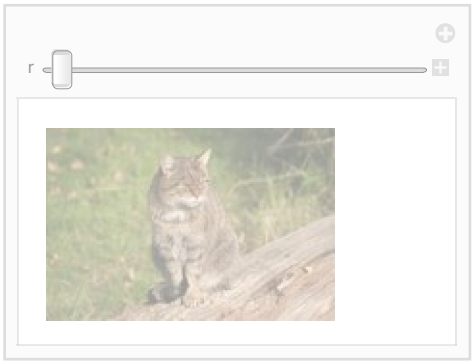
In[46]:=
```
Table[Rotate[Style["A", 100], r Degree], {r, 0, 360, 30}]
```

Out[46]=



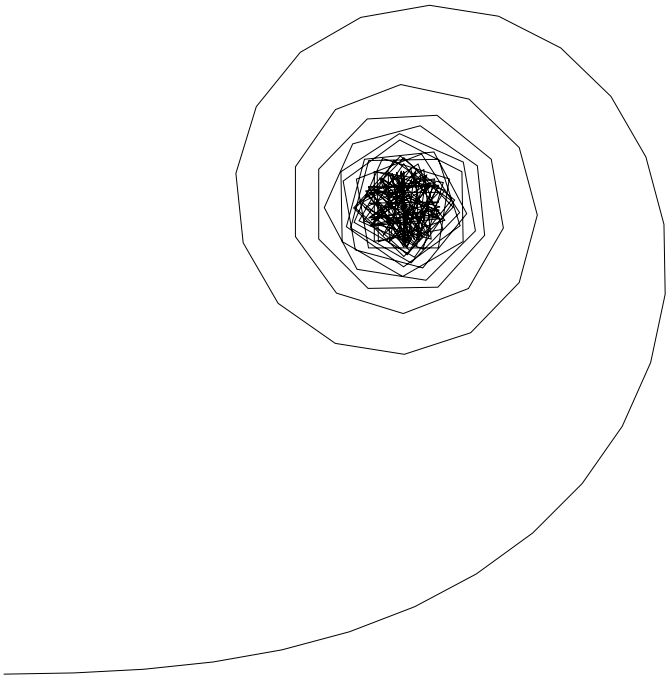
```
Manipulate[Rotate[cat["Image"], r Degree], {r, 0, 180}]
```

Out[47]=



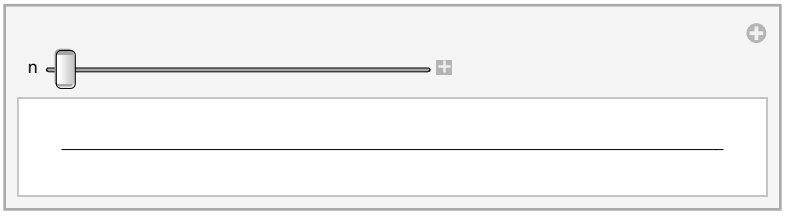
In[48]:=
```
Graphics[Line[AnglePath[Range[180] Degree]]]
```

Out[48]=



In[49]:=
```
Manipulate[Graphics[Line[AnglePath[Table[n Degree, 100]]]], {n, 0, 360}]
```

Out[49]=



In[50]:=
```
Graphics[Line[AnglePath[IntegerDigits[2^10000]*30 Degree]]]
```

Out[50]=