

Eli — PS 5 — 2025-02-04

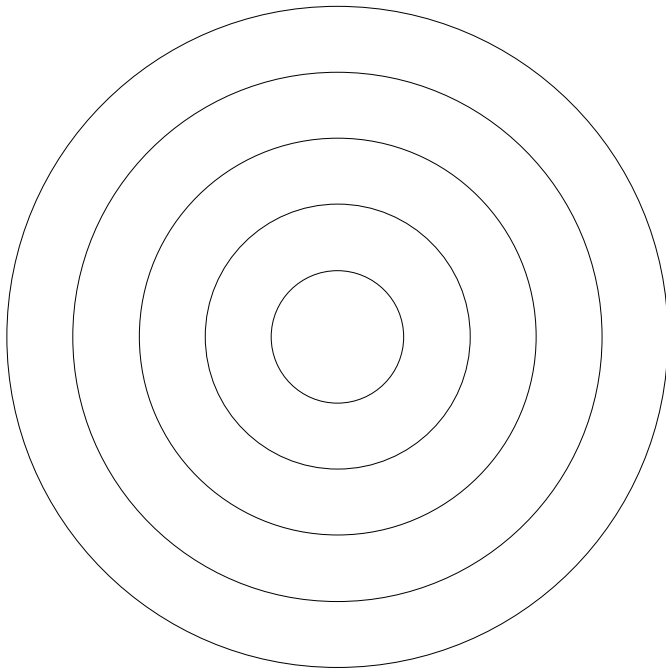
EIWL3 Sections 14 and 17

Chapter 14

In[320]:=

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

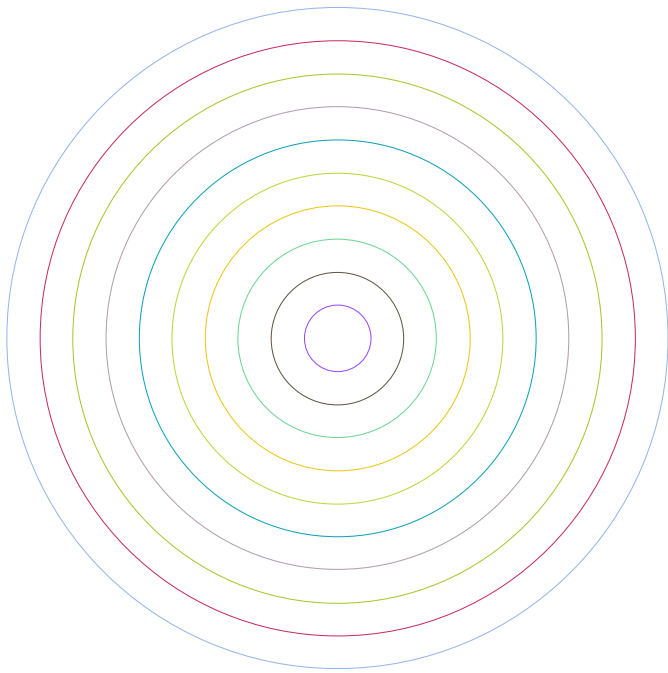
Out[320]=



In[321]:=

```
Graphics[Table[Style[Circle[{0, 0}, r], RandomColor[]], {r, 1, 10}]]
```

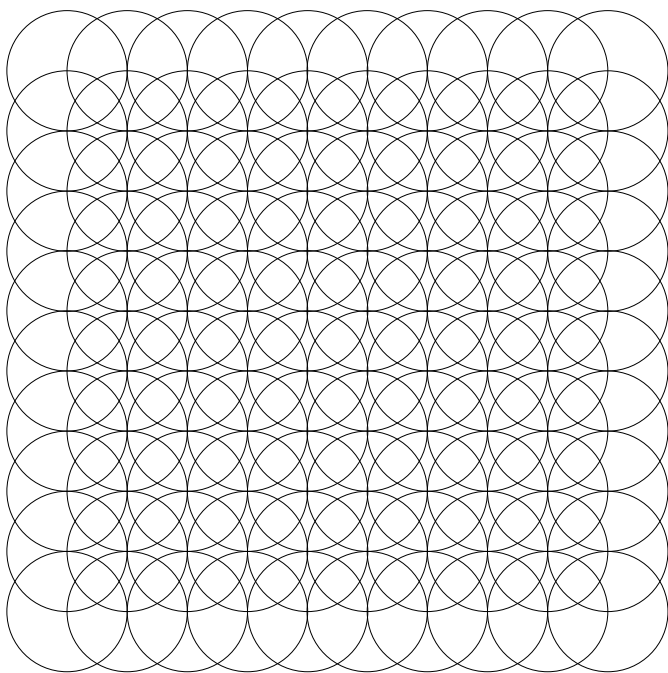
Out[321]=



In[322]:=

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

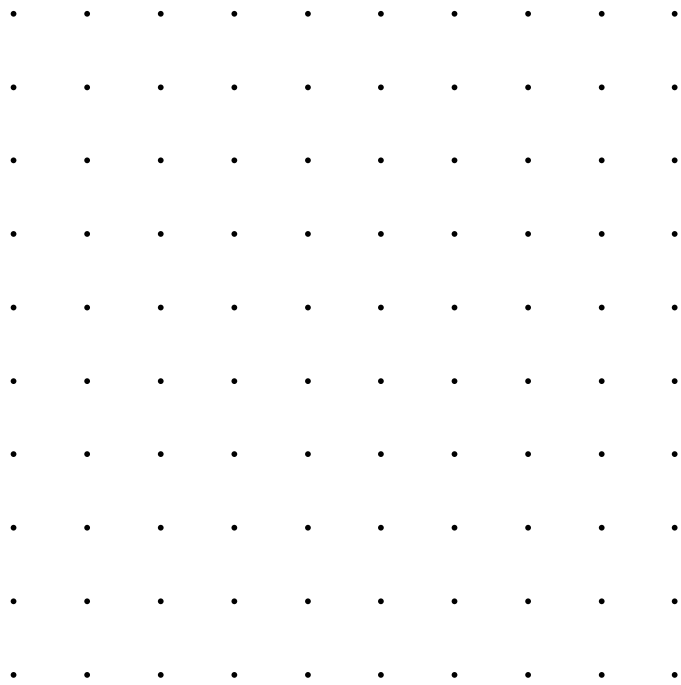
Out[322]=



```
In[323]:=
```

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

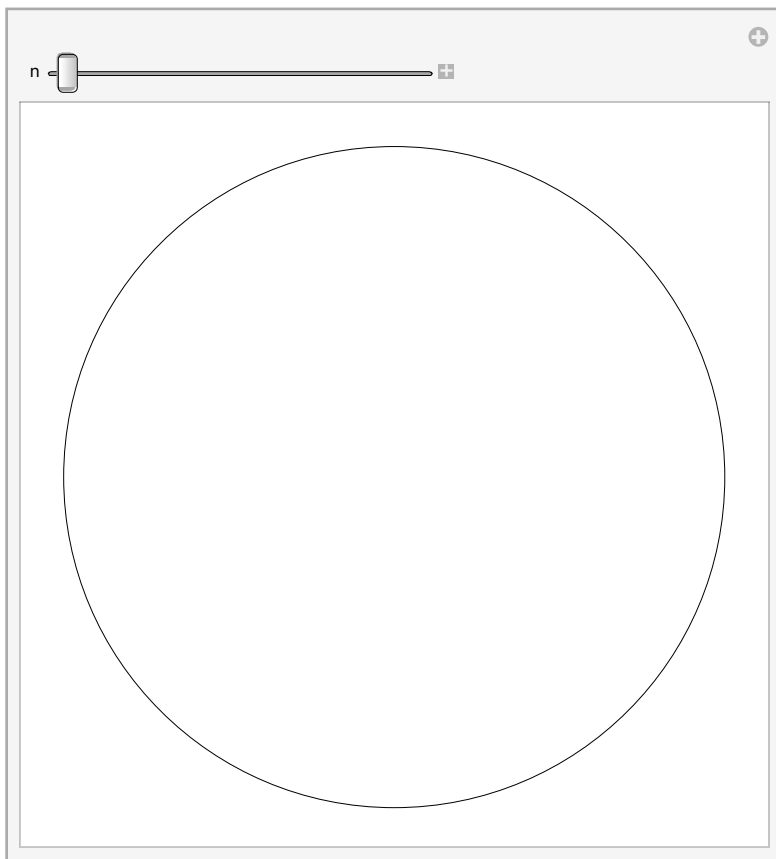
```
Out[323]=
```



In[324]:=

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

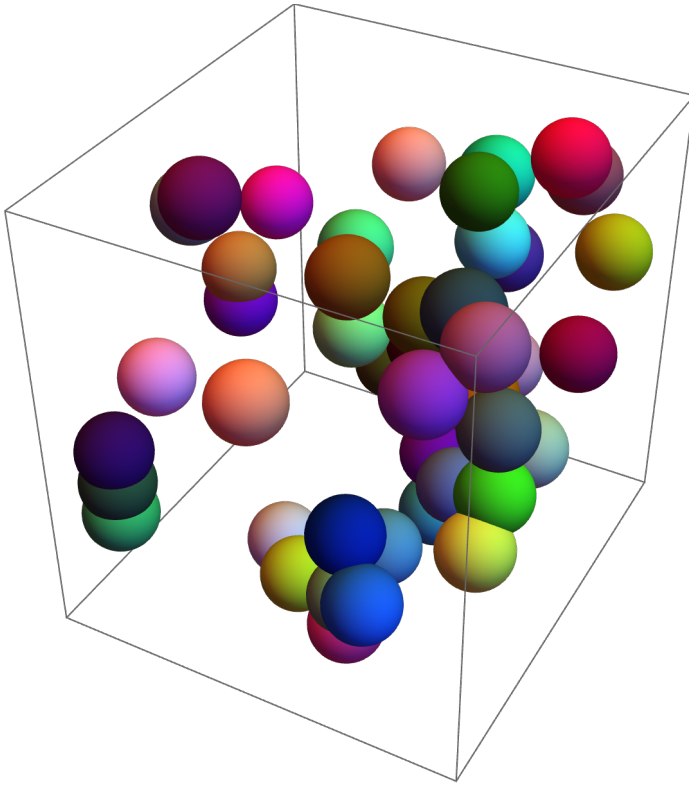
Out[324]=



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. 

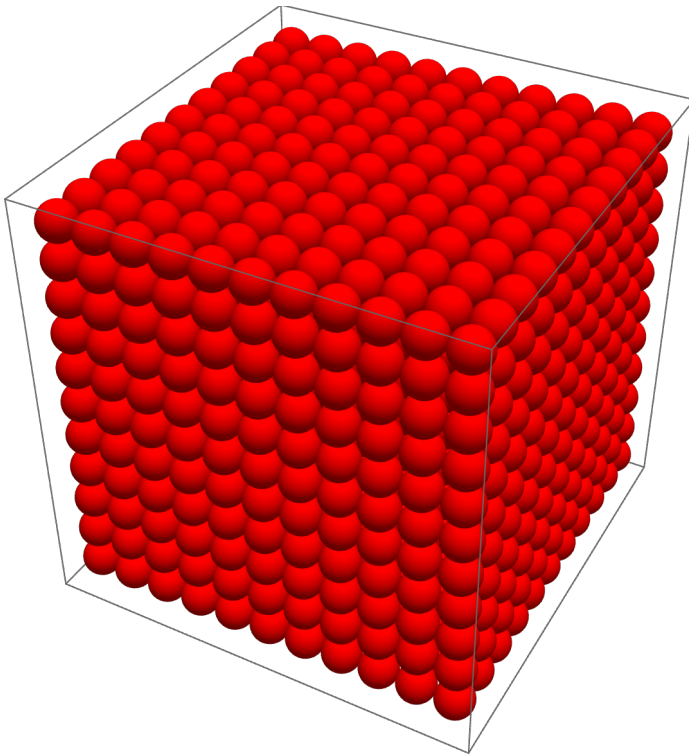
Out[326]=

```
Show[%827, Axes → True, AxesStyle → 
```

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}]]
```

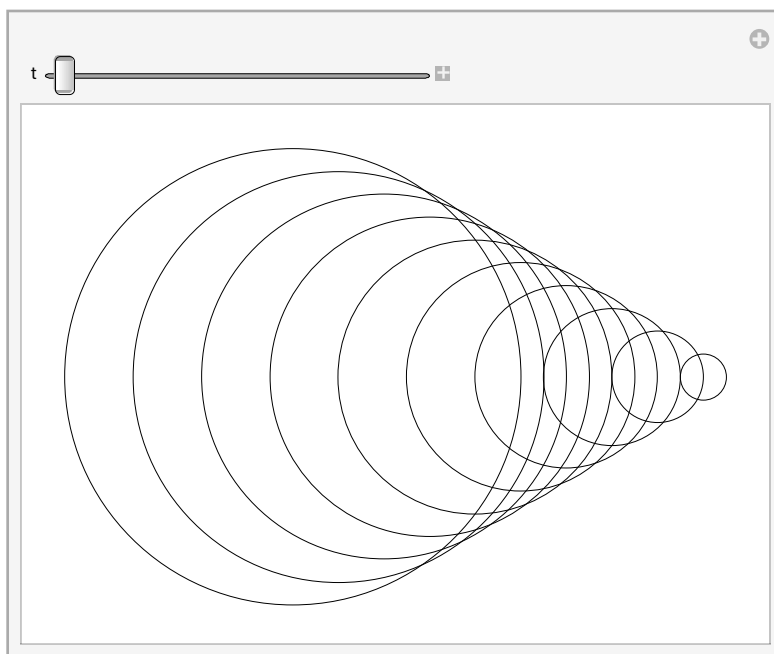
Out[327]=



In[328]:=

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

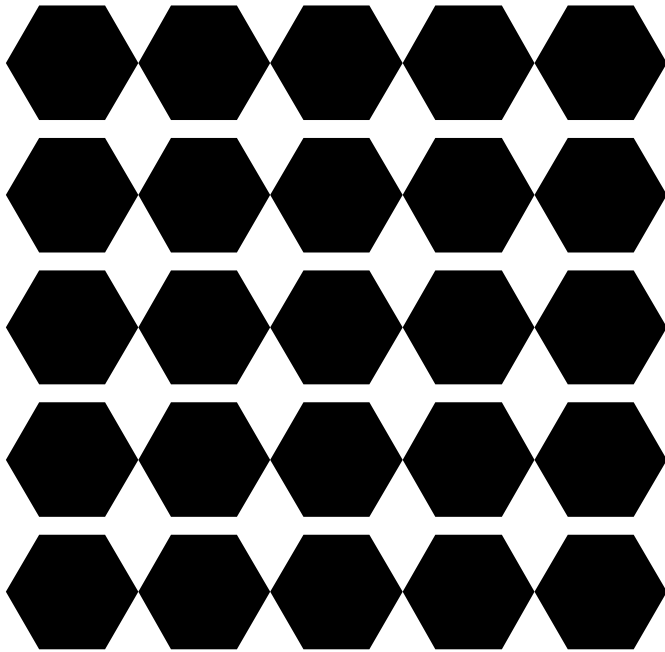
Out[328]=



In[329]:=

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

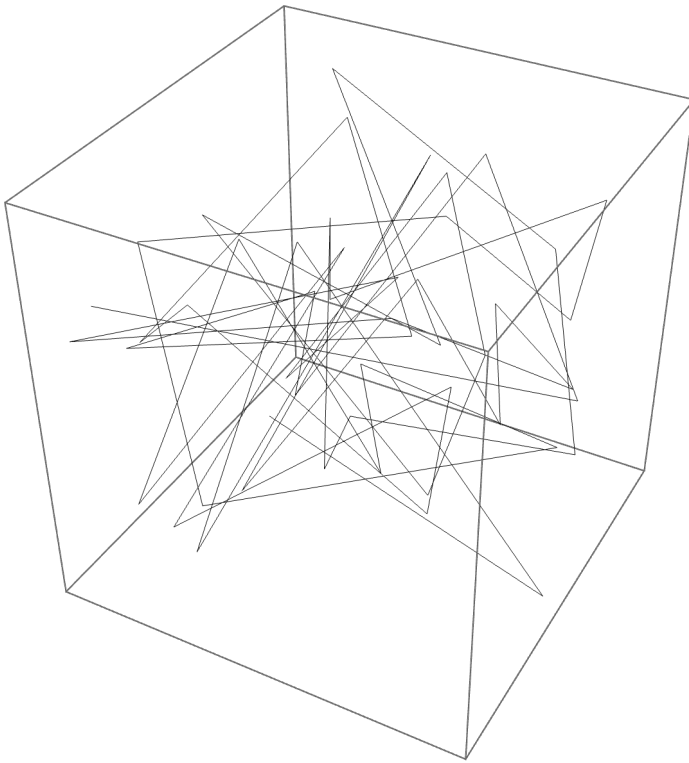
Out[329]=



In[330]:=

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

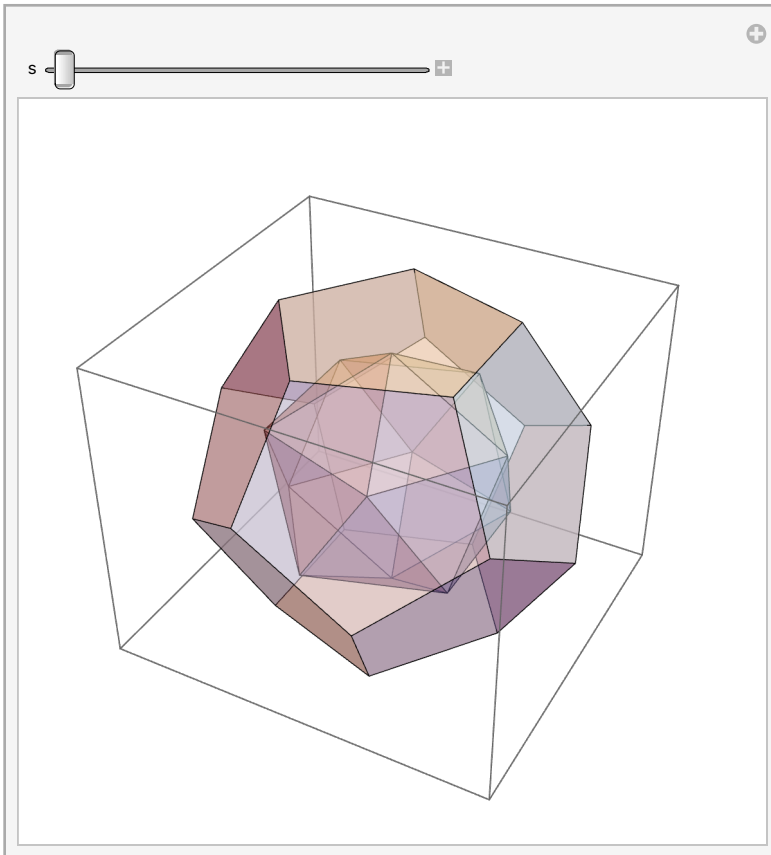
Out[330]=



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[  ☒, "Kilograms"]
```

Out[332]=

2.04117 kg

```
UnitConvert[  ☒, "Kilometers/hour"]
```

Out[333]=

96.963 km/h

```
UnitConvert[ ☒, ["Height"], "Miles"]
```

Out[334]=

0.205052 mi

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

Out[335]=

26.8147

Earth PLANET [More] [Check] ["Mass"] / Moon PLANETARY MOON [More] [Check] ["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]=

၀၂၂၈၄

```
In[341]:=
```

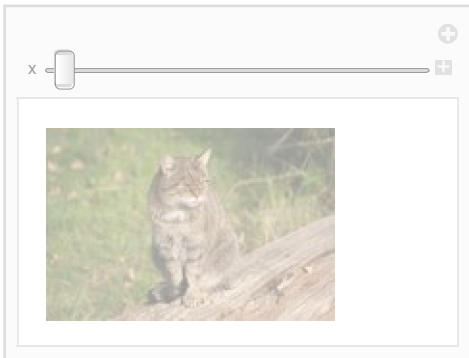
```
Table[Rotate["A", x Degree], {x, 0, 360, 30}]
```

Out[341]=

$\{A, \textcircled{A}, \nabla, \triangleleft, \triangle, \blacktriangledown, \vee, \triangledown, \rhd, \triangleright, \vartriangleright, \heartsuit, A\}$

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

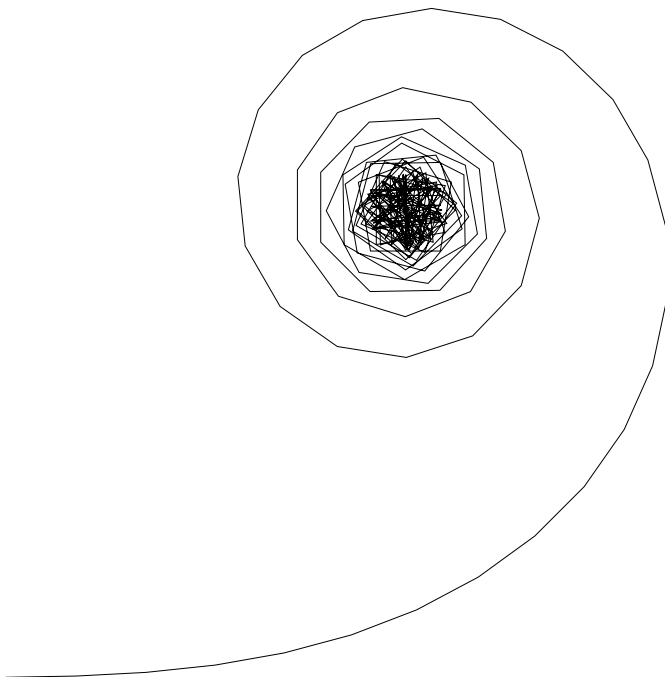
Out[342]=



In[343]:=

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

Out[343]=



In[344]:=

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

Out[344]=



In[345]:=

```
Graphics[Line[AnglePath[IntegerDigits[2^10 000 ] 30 Degree]]]
```

Out[345]=

