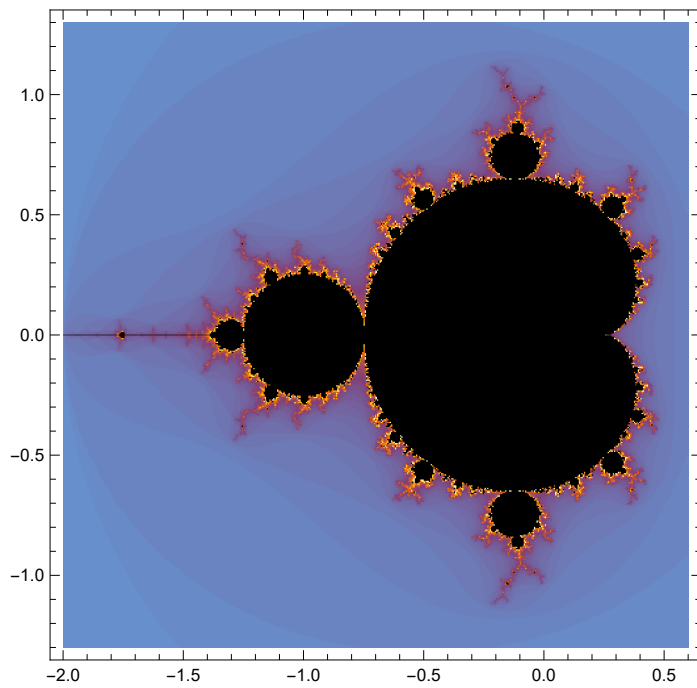


In[]:= **MandelbrotSetPlot[]**

曼德博集合图

Out[]:=



```

In[ ]:= DynamicModule[{pts, text, lines},
  |动态模块

  Manipulate[pts = Table[{-Cos[θ], Sin[θ]}, {θ, 0, 2 π -  $\frac{2 \pi}{m}$ ,  $\frac{2 \pi}{m}$ }]];
  |交互式操作 |表格 |余弦 |正弦

  text = Table[Text[ToString[n - 1], pts[[n]] 1.1], {n, m}];
  |表格 |文本 |转换为字符串

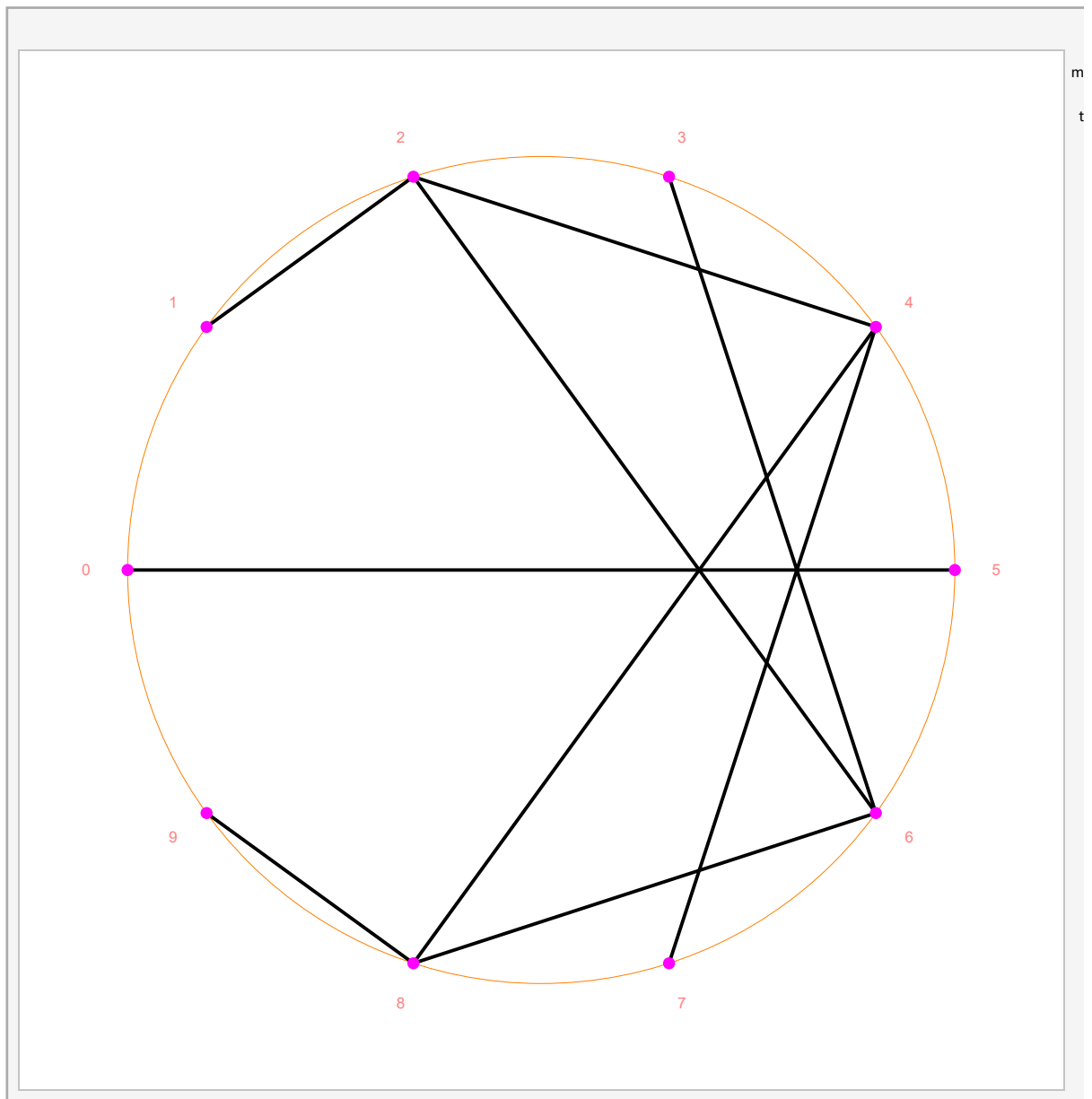
  lines = Line@Table[{pts[[n]], pts[[Mod[(n - 1) t, m] + 1]]}, {n, m}];
  |线段 |表格 |模余

  Graphics[{{Orange, Circle[]}, {Thick, lines},
    |图形 |橙色 |圆 |粗
    {PointSize[Large], Magenta, Point[pts]}}, {Pink, text}},
    |点的大小 |大 |品红色 |点 |粉色

  ImageSize → Large, PlotRange → 1.2], {m, 10, 100, 1}, {t, 2, 52, 1}]]
  |图像尺寸 |大 |绘制范围

```

Out[]:=



```

In[*]:= DynamicModule[{pts, text, lines},
|动态模块

Manipulate[pts = Table[{-Cos[θ], Sin[θ]}, {θ, 0, 2π -  $\frac{2\pi}{m}$ ,  $\frac{2\pi}{m}$ }]];
|交互式操作 |表格 |余弦 |正弦

text = Table[Text[ToString[n - 1], pts[[n] 1.1], {n, m}]];
|表格 |文本 |转换为字符串

lines = Line@Table[
|线段 |表格
  {pts[[n]], {-Cos[2π Mod[(n - 1) t, m] / m], Sin[2π Mod[(n - 1) t, m] / m]}}, {n, m}];
|余弦 |模余 |正弦 |模余

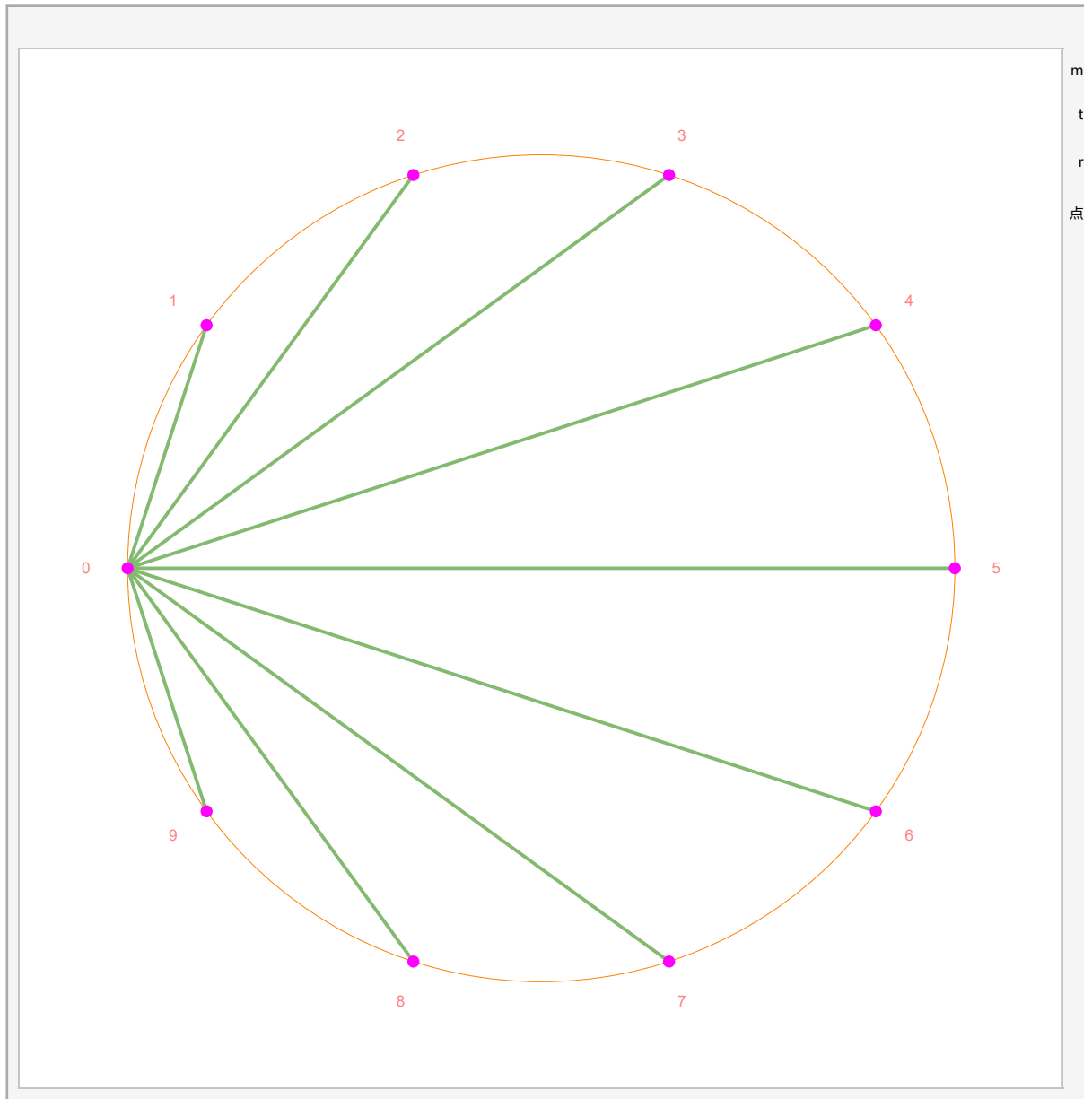
Graphics[{{Orange, Circle[]},
|图形 |橙色 |圆
  {Thick, ColorData["Rainbow"][0.5 Sin[10 * 2π t / 100] + 0.5], lines}},
|粗 |颜色数据 |正弦

If[s, {{PointSize[Large], Magenta, Point[pts]}, {Pink, text}}],
|如果 |点的大小 |大 |品红色 |点 |粉色

ImageSize → Large, PlotRange → 1.2], {m, 10, 200, 1}, {t, 0, 100, AnimationRate → r},
|图像尺寸 |大 |绘制范围 |动画播放速率

{r, {0.01, 0.1, 0.5, 1}}, {{s, True, "点"}, {True → "显示", False → "隐藏"}}]]
|真 |真 |假

```

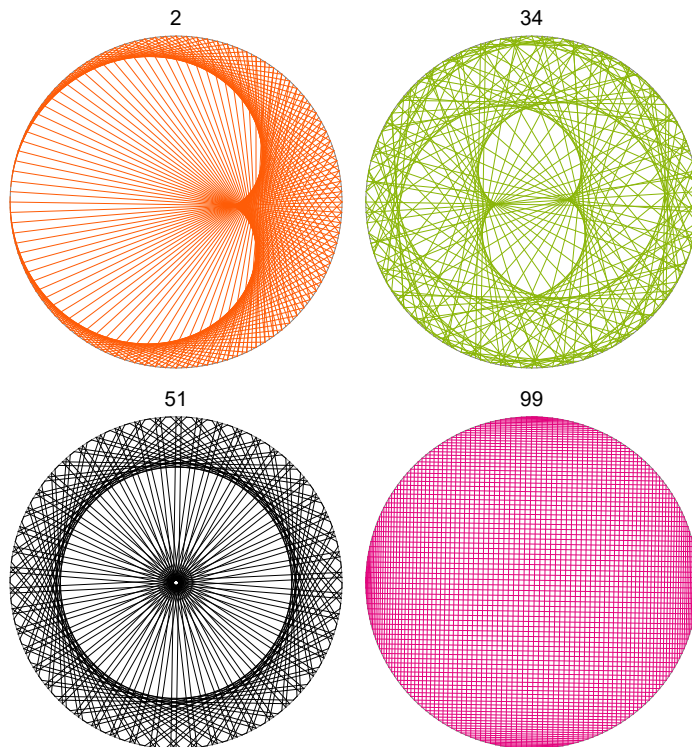
$Out[*]=$ 

```

In[ ]:= l = {2, 34, 51, 99};
m = 200;
table = Table[Graphics[{{Gray, Circle[]}, {ColorData[3][t],
  |表格 |图形 |灰色 |圆 |颜色数据
  Line@Table[{{-Cos[2 π n / m], Sin[2 π n / m]}, {-Cos[2 π Mod[(n - 1) t, m] / m],
  |线段 |表格 |余弦 |正弦 |余弦 |模余
    Sin[2 π Mod[(n - 1) t, m] / m]}}, {n, m}]}], PlotLabel → t],
  |正弦 |模余 |绘图标签
  {t, l}];
Grid[Partition[table, 2]]
|格子 |划分

```

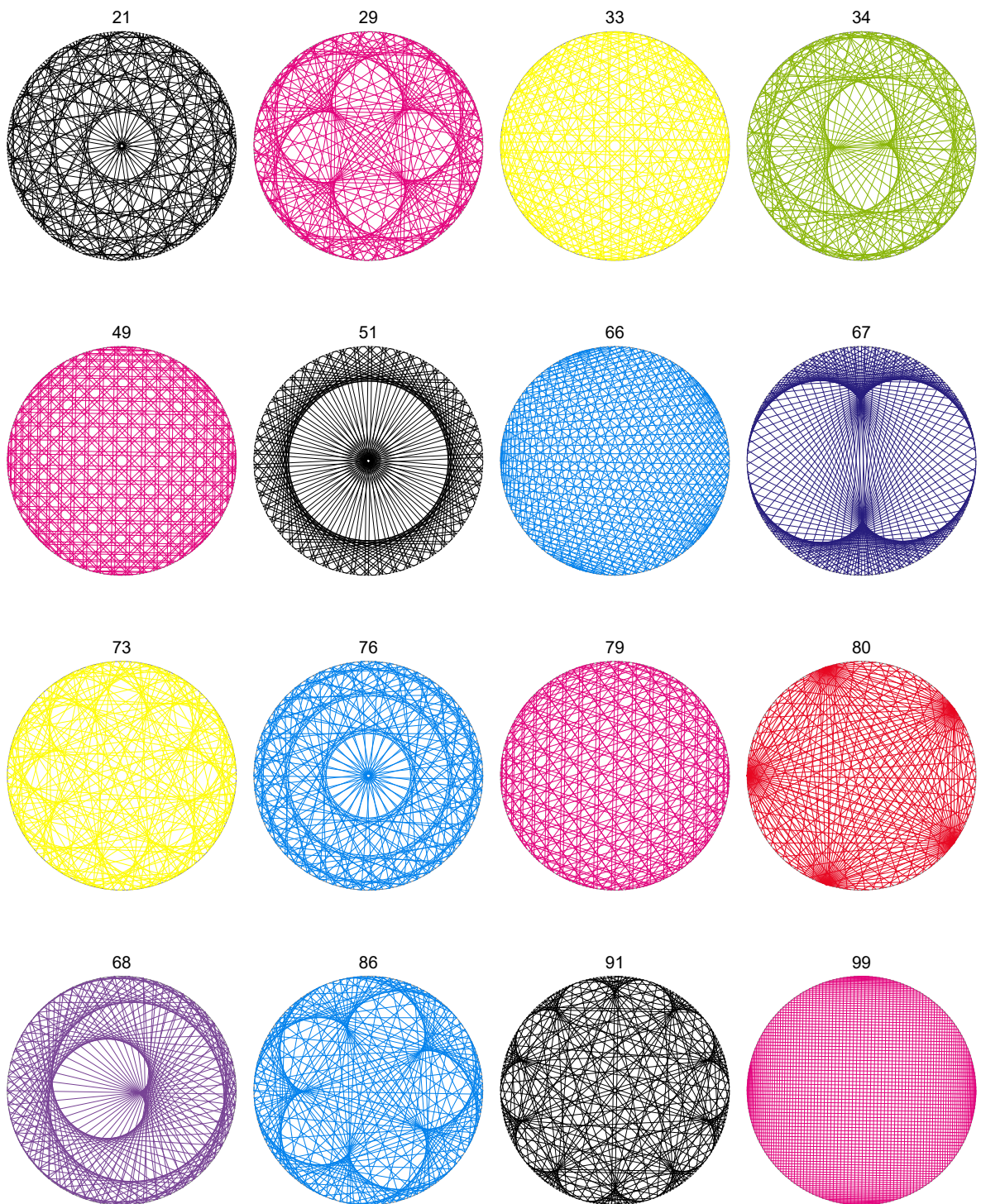
Out[]:=



```

In[ ]:= l = {21, 29, 33, 34, 49, 51, 66, 67, 73, 76, 79, 80, 68, 86, 91, 99};
m = 200;
table = Table[Graphics[{{Gray, Circle[]}, {ColorData[3][t],
  |表格 |图形 |灰色 |圆 |颜色数据
  Line@Table[{{-Cos[2 π n / m], Sin[2 π n / m]}, {-Cos[2 π Mod[(n - 1) t, m] / m],
  |线段 |表格 |余弦 |正弦 |余弦 |模余
    Sin[2 π Mod[(n - 1) t, m] / m]}}, {n, m}]}], PlotLabel → t],
  |正弦 |模余 |绘图标签
  {t, l}];
Grid[Partition[table, 4]]
|格子 |划分

```



随机弦

```
In[ ]:= RandomCircleChord ["TwoPointsInCircle", 300] // Graphics
```

图形

Out[]:=

