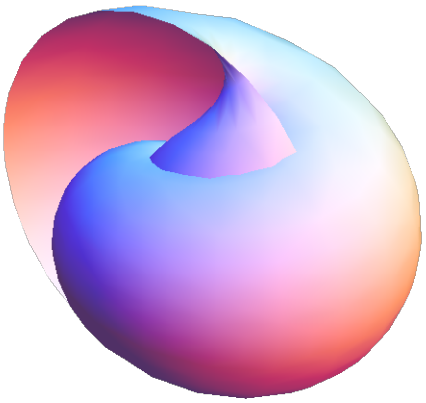
In[•]:=
```
radius = (3 + t Cos[x])
ParametricPlot3D[{radius * Cos[t], radius * Sin[t], t * Sin[x]},
 {x, 0, 2 π}, {t, 0, 3 π}, Axes → {False, False, False},
 AxesLabel → {"X", "Y", "Z"}, Mesh → None, Boxed → False, PlotTheme -> "Classic"]
```

Out[•]= $3 + t \cos[x]$

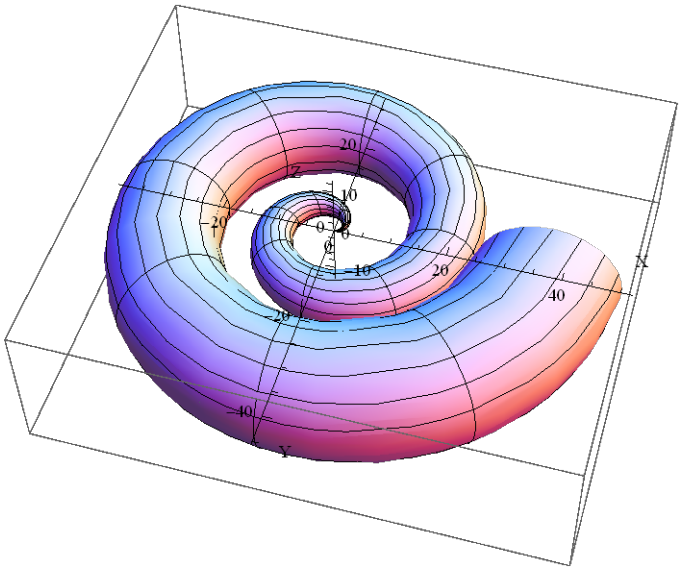
Out[•]=



In[•]:=
```
radius = t (3 + Cos[x])
ParametricPlot3D[{radius * Cos[t], radius * Sin[t], t * Sin[x]},
 {x, 0, 2 π}, {t, 0, 4 π}, AxesOrigin → {0, 0, 0},
 AxesLabel → {"X", "Y", "Z"}, PlotTheme → {"Classic"}]
```

Out[•]= $t (3 + \cos[x])$

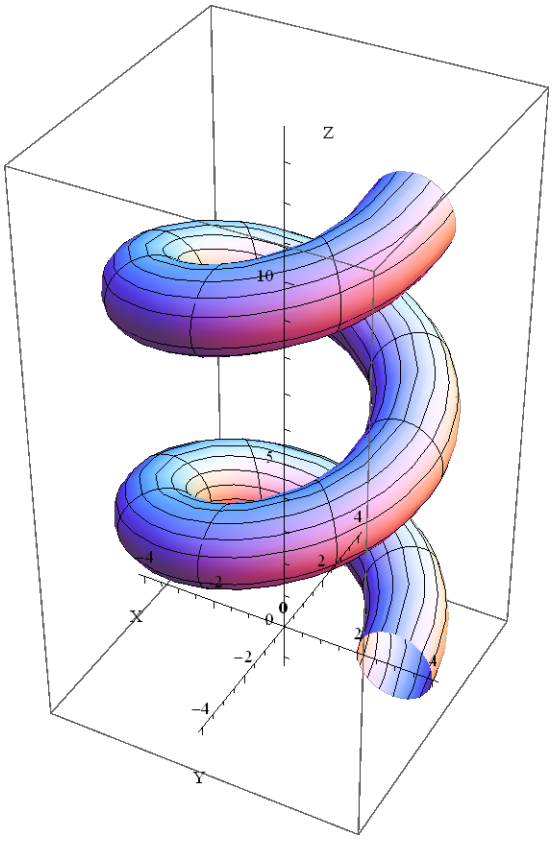
Out[•]=



In[•]:=
```
radius = (3 + Cos[x])
ParametricPlot3D[{radius * Cos[t], radius * Sin[t], t + Sin[x]},
 {x, 0, 2 π}, {t, 0, 4 π}, AxesOrigin → {0, 0, 0},
 AxesLabel → {"X", "Y", "Z"}, PlotTheme → {"Classic"}]
```

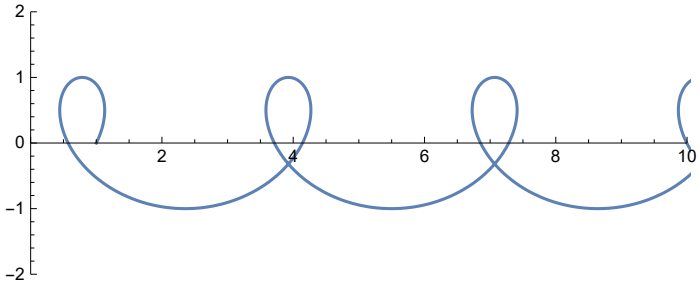
Out[•]= $3 + \text{Cos}[x]$

Out[•]=



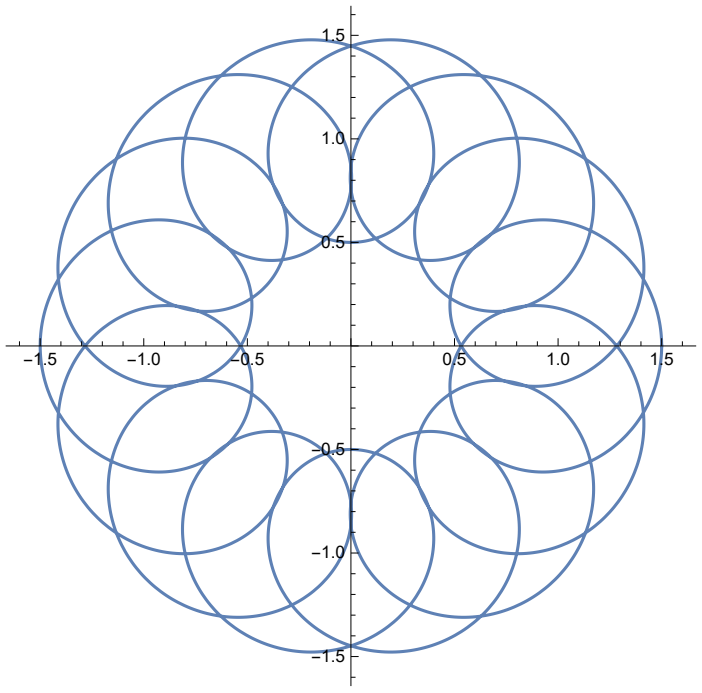
In[ ]:= `ParametricPlot[{Cos[t] + 0.5 t, Sin[t]}, {t, 0, 10 π}, PlotRange → {{0, 10}, {-2, 2}}]`

Out[ ]=



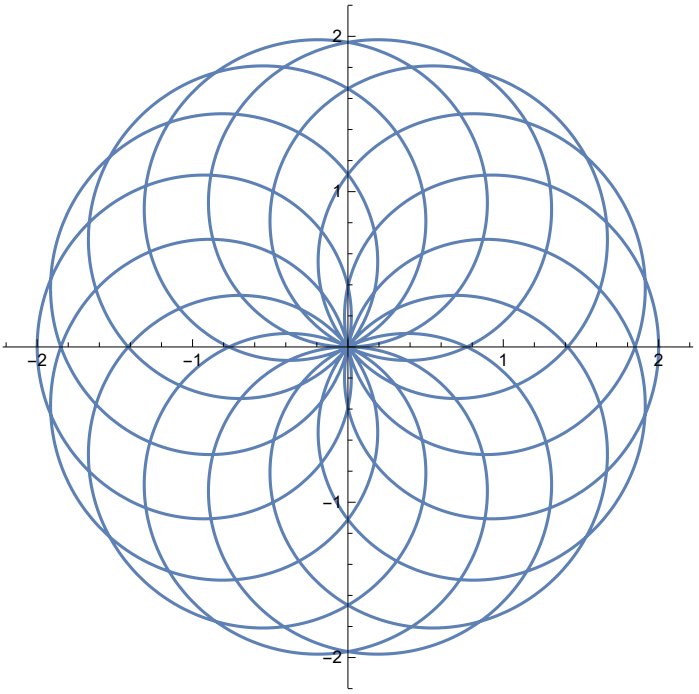
In[ ]:= `ParametricPlot[{Cos[t] + 0.5 Cos[15 t], Sin[t] + 0.5 Sin[15 t]}, {t, 0, 2 π}]`

Out[ ]=



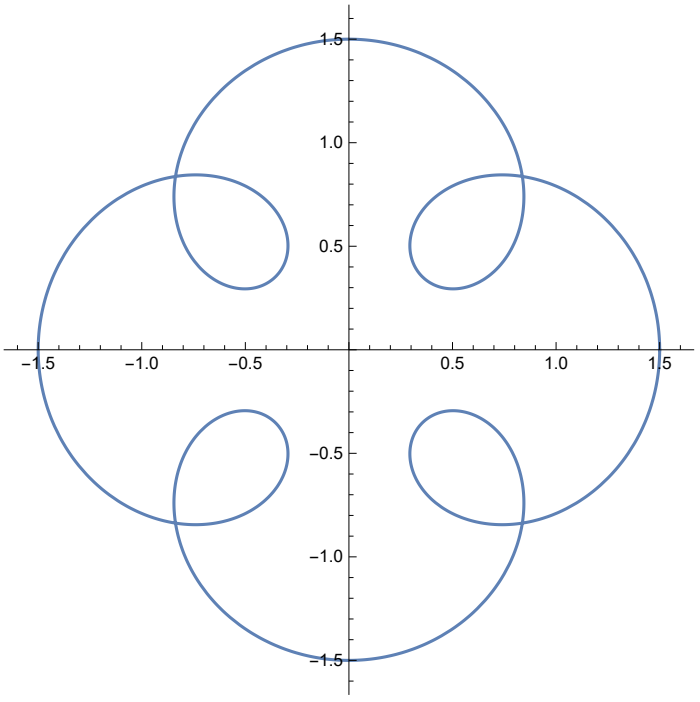
In[•]:=
```
ParametricPlot[{Cos[t] + Cos[15 t], Sin[t] + Sin[15 t]}, {t, 0, 2 π}]
```

Out[•]=



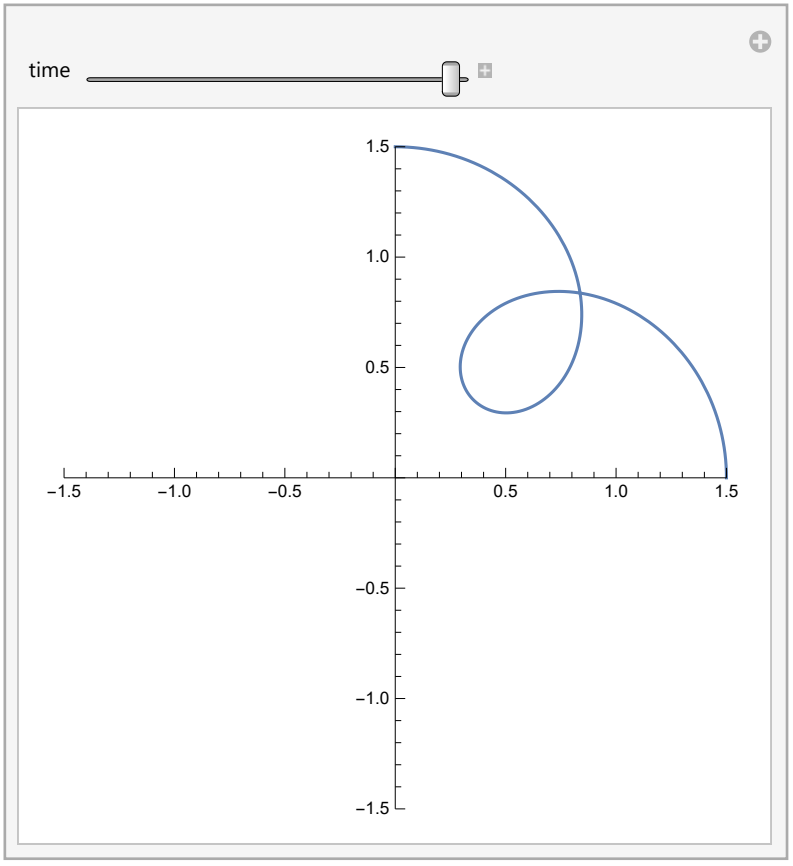
In[•]:=
```
ParametricPlot[{Cos[t] + 0.5 Cos[5 t], Sin[t] + 0.5 Sin[5 t]}, {t, 0, 2 π}]
```

Out[•]=



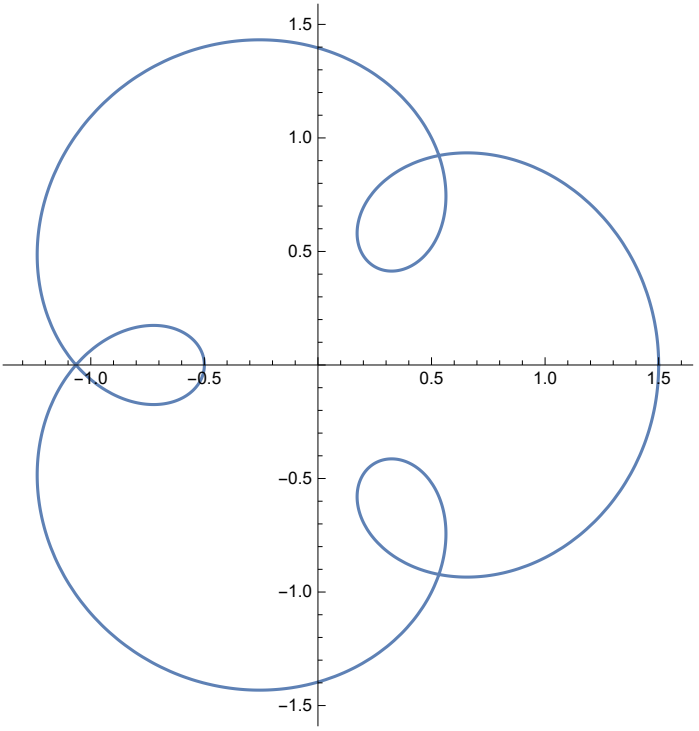
In[ ]:=
```
Manipulate[ParametricPlot[{Cos[t] + 0.5 Cos[5 t], Sin[t] + 0.5 Sin[5 t]},
  {t, 0, time}, PlotRange → {{-1.5, 1.5}, {-1.5, 1.5}}], {time, 0.001, 0.5 π}]
```

Out[ ]=



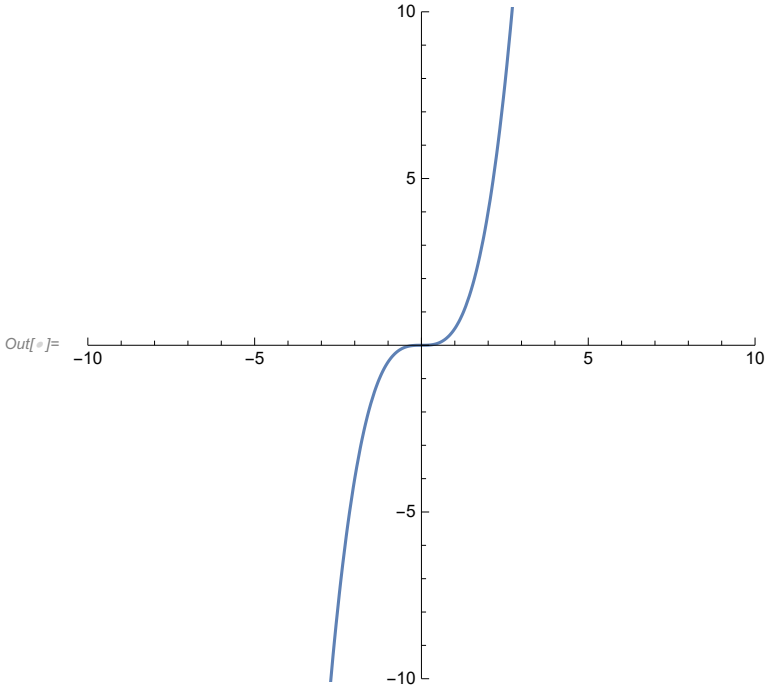
In[ ]:=
```
ParametricPlot[{Cos[t] + 0.5 Cos[4 t], Sin[t] + 0.5 Sin[4 t]}, {t, 0, 2 π}]
```

Out[ ]=



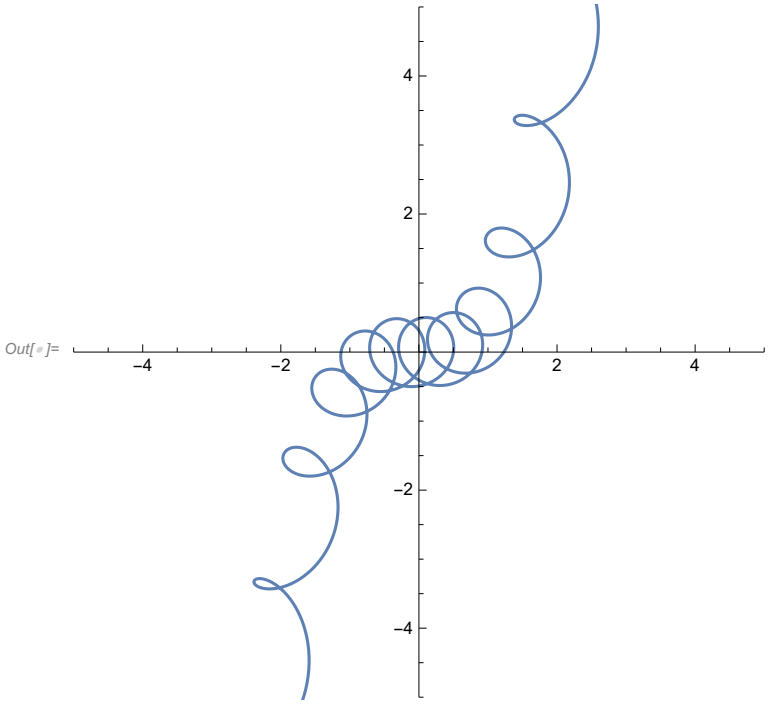
In[•]:=
```
ParametricPlot[{t, 0.5 t^3}, {t, -10, 10}, PlotRange → {{-10, 10}, {-10, 10}}]
```

Out[•]=



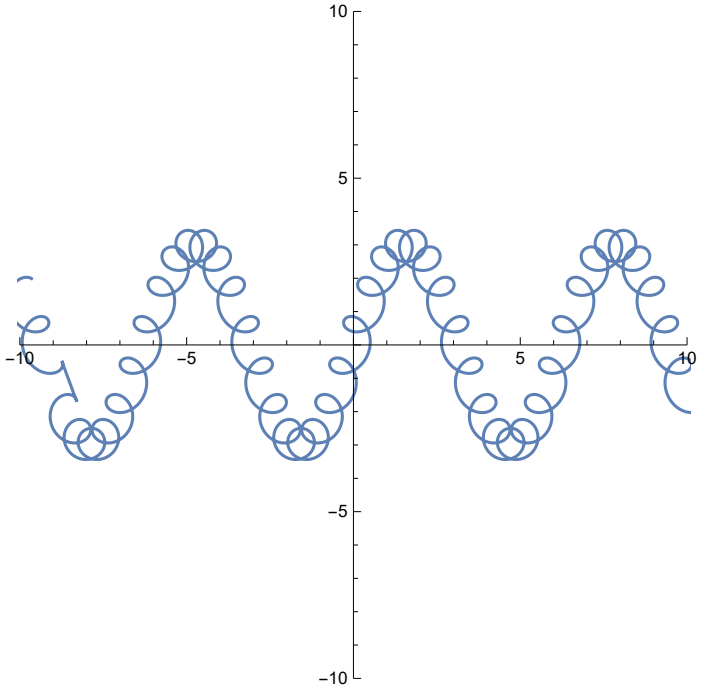
In[•]:=
```
ParametricPlot[{t + 0.5 Cos[15 t], 0.5 t^3 + 0.5 Sin[15 t]},
 {t, -10, 10}, PlotRange → {{-5, 5}, {-5, 5}}]
```

Out[•]=



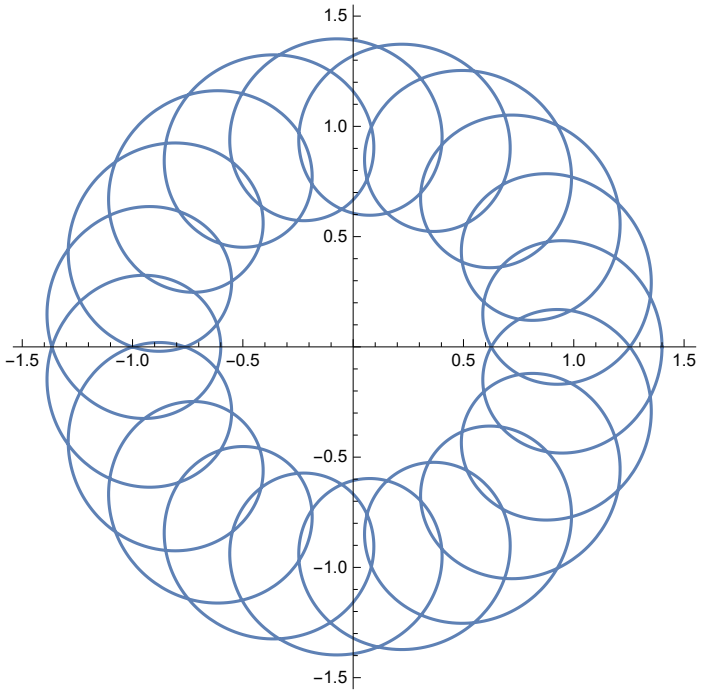
In[ ]:=
```
ParametricPlot[{t + 0.5 Cos[15 t], 3 Sin[t] + 0.5 Sin[15 t]},
 {t, -10, 10}, PlotRange → {{-10, 10}, {-10, 10}}]
```

Out[ ]=



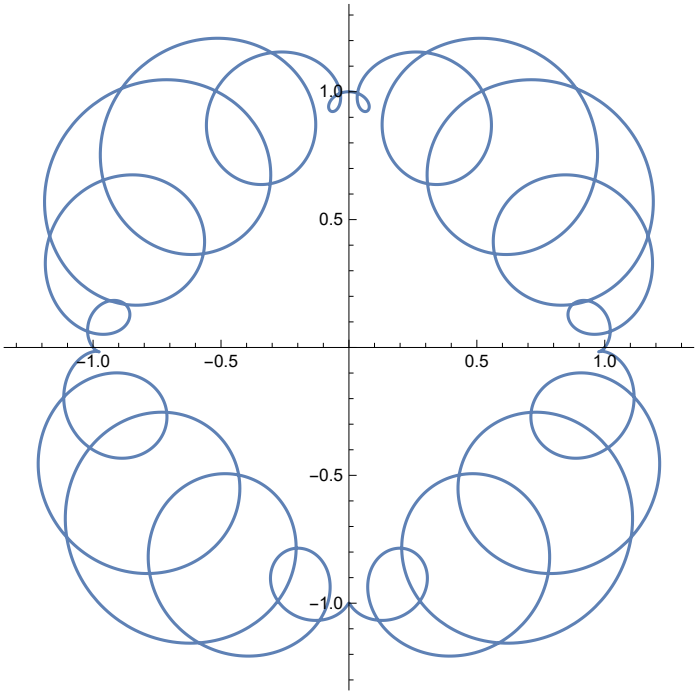
In[ ]:=
```
ParametricPlot[{Cos[t] + 0.4 Cos[20 t], Sin[t] + 0.4 Sin[20 t]}, {t, 0, 2 π}]
```

Out[ ]=



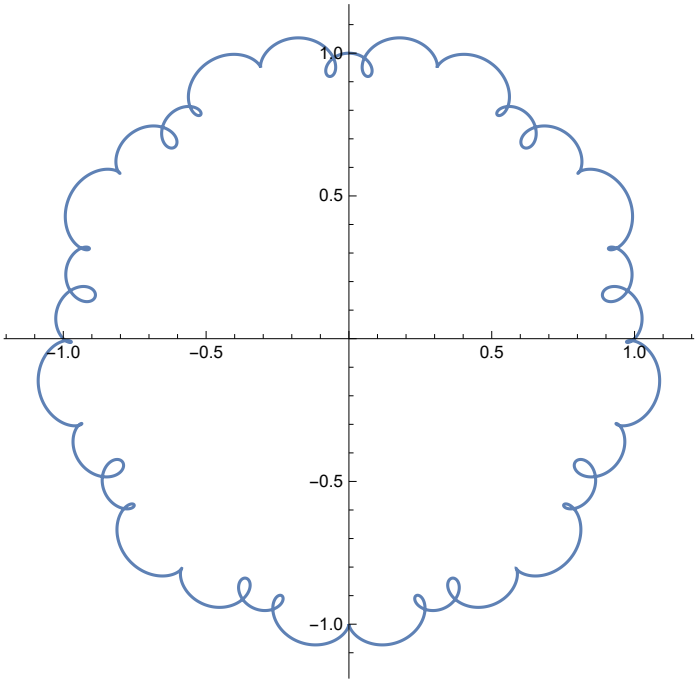
In[ ]:=
```
ParametricPlot[
 {Cos[t] + 0.4 * Sin[2 t] * Cos[20 t], Sin[t] + 0.4 * Sin[2 t] * Sin[20 t]}, {t, 0, 2 π}]
```

Out[ ]=



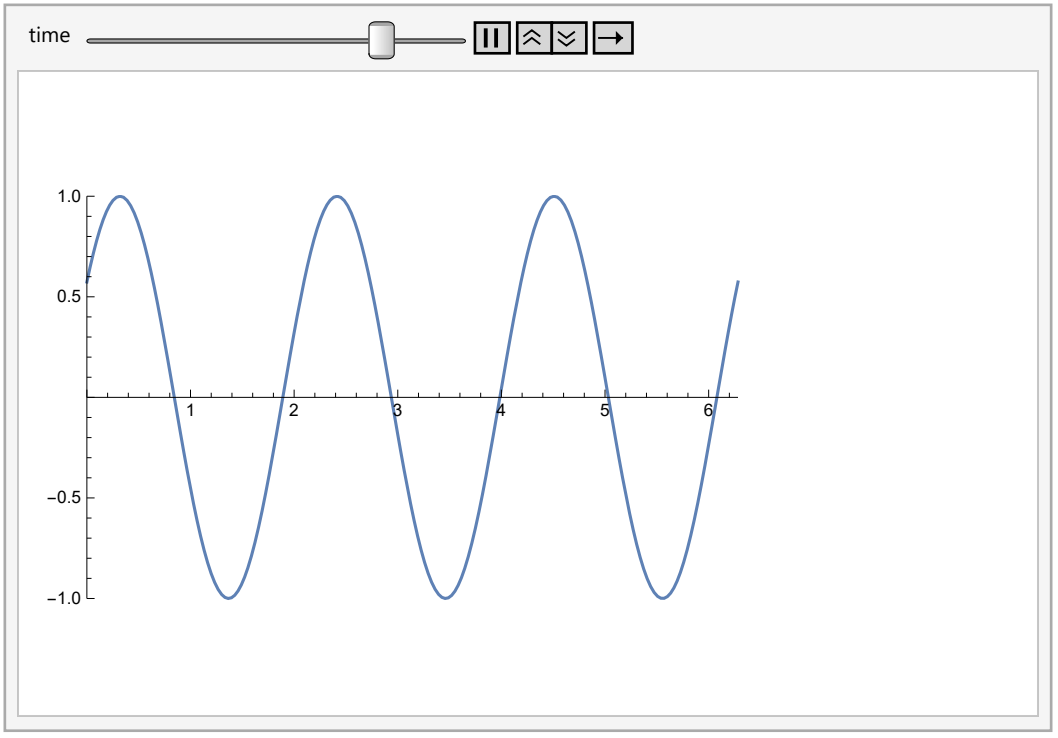
In[ ]:=
```
ParametricPlot[
 {Cos[t] + 0.1 * Sin[10 t] * Cos[20 t], Sin[t] + 0.1 * Sin[10 t] * Sin[20 t]}, {t, 0, 2 π}]
```

Out[ ]=



In[ ]:=
```
gif = Animate[Plot[Sin[3 t + time],
    {t, 0, 2 Pi}, PlotRange → {{0, 2 Pi}, {-1, 1}}], {time, 0, 6 Pi}]
```

Out[ ]=



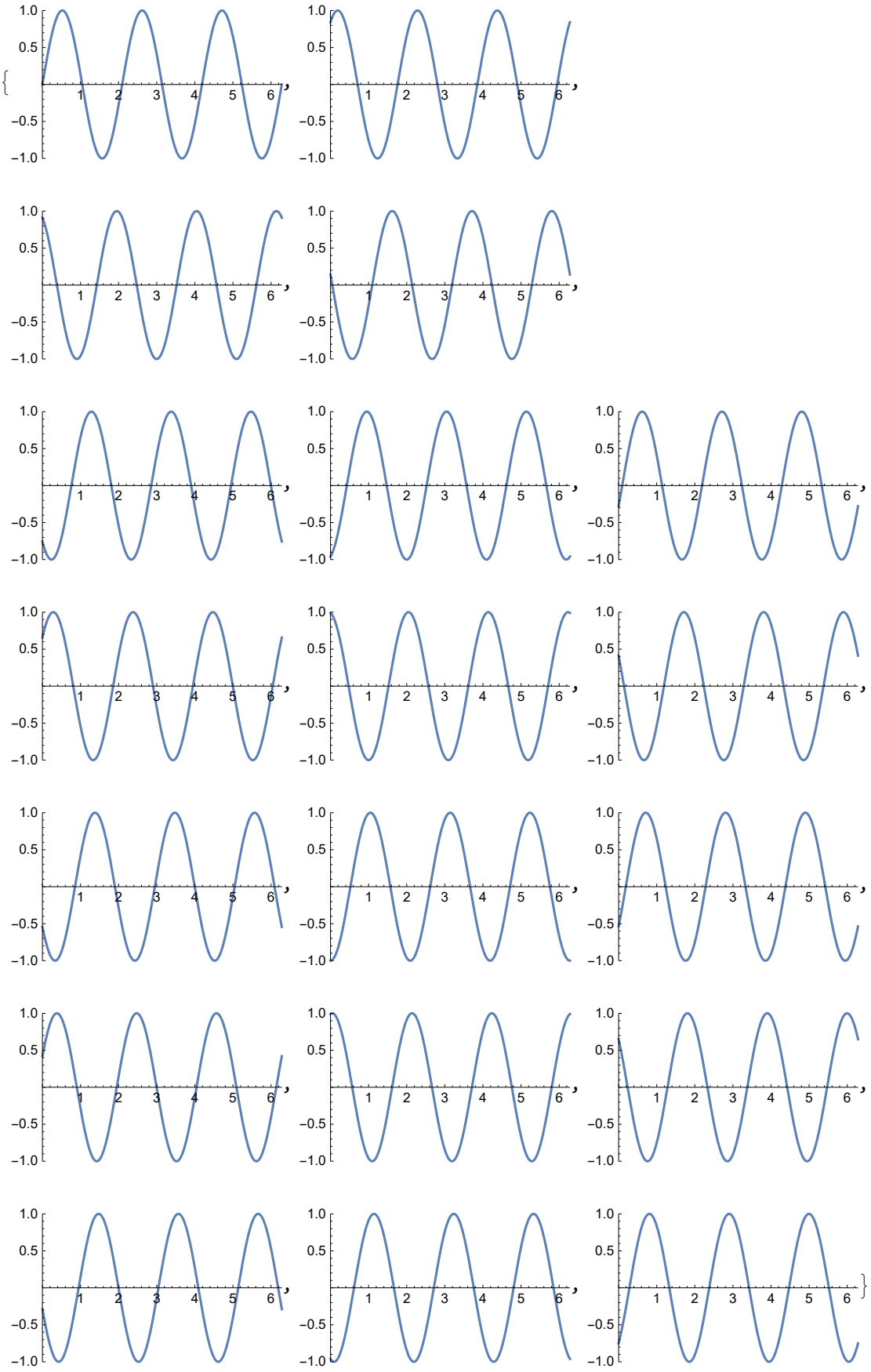
In[ ]:=
```
Export["sineTimed.swf", gif]
```

Out[ ]=
```
sineTimed.swf
```

In[ ]:=
```
SystemOpen["sineTimed.swf"]
```

In[ ]:=
```
gif2 = Table[Plot[Sin[3 t + time], {t, 0, 2 Pi},
    PlotRange → {{0, 2 Pi}, {-1, 1}}], {time, 0, 6 Pi}]
Export["sin.gif",
 gif2]
```

Out[•]=



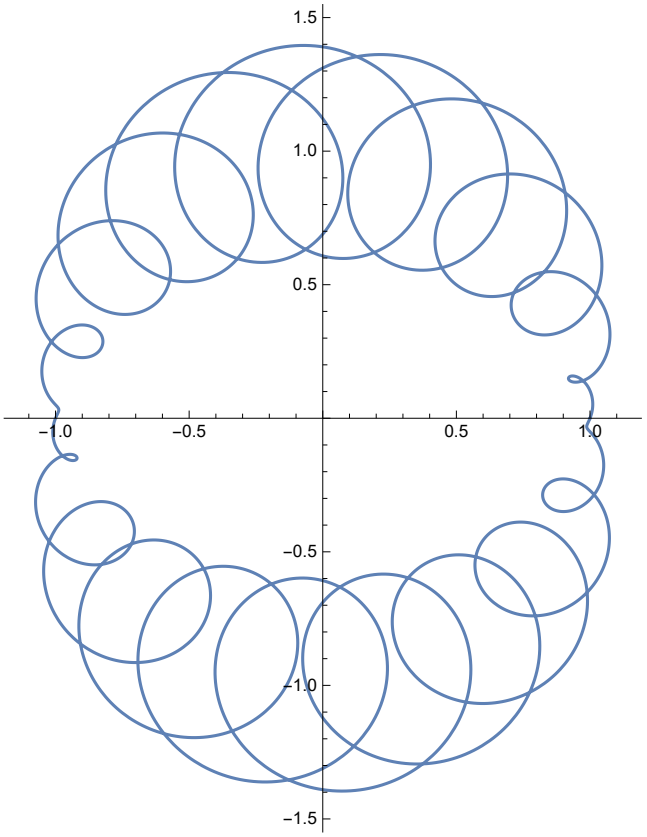
Out[•]= sin.gif

In[•]:=
```
SystemOpen[DirectoryName[AbsoluteFileName["sin.gif"]]]
```

In[•]:=
```
SystemOpen["sin.gif"]
```

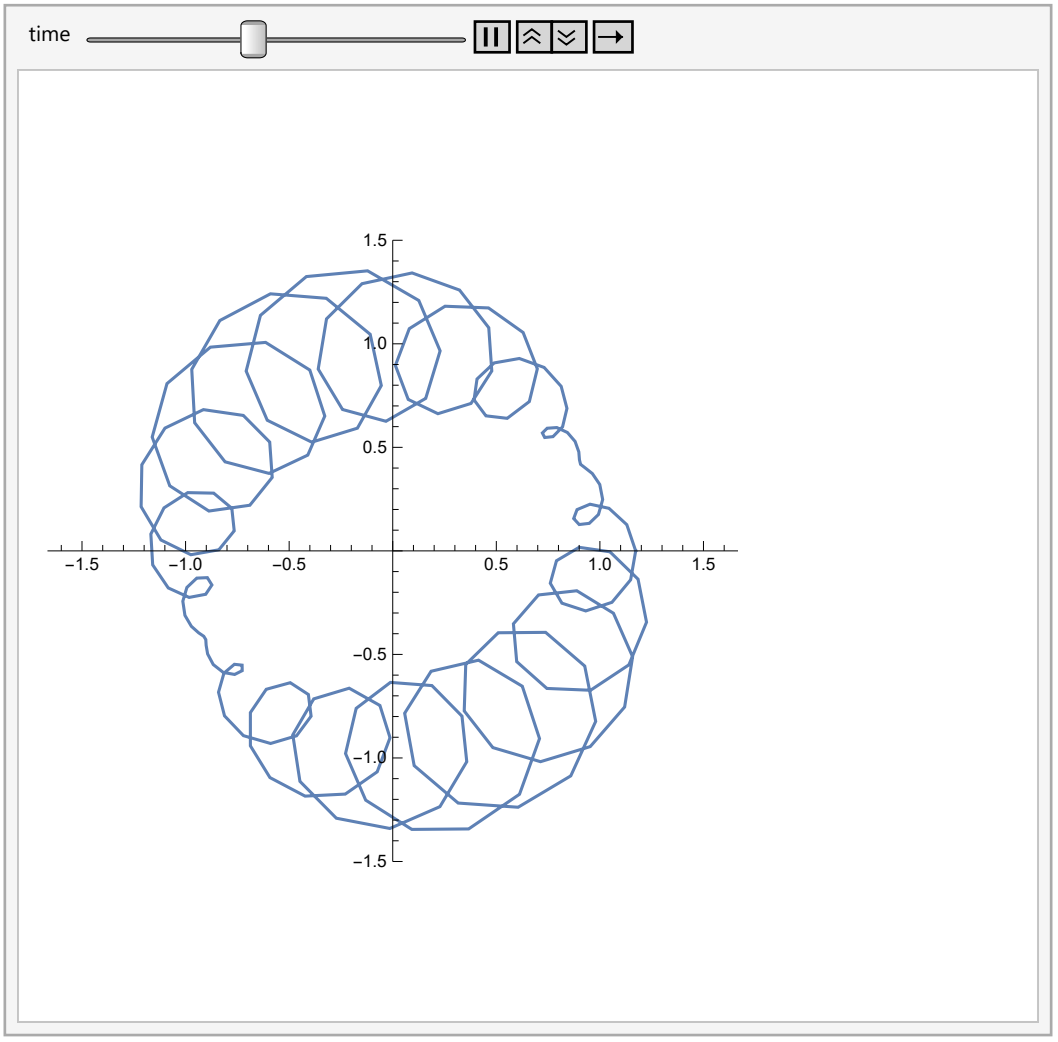
In[•]:=
```
ParametricPlot[
 {Cos[t] + 0.4 * Sin[t] * Cos[20 t], Sin[t] + 0.4 * Sin[t] * Sin[20 t]}, {t, 0, 2 π}]
```

Out[•]=



In[ ]:=
```
Animate[ParametricPlot[
  {Cos[t] + 0.4 * Sin[t + time] * Cos[20 t], Sin[t] + 0.4 * Sin[t + time] * Sin[20 t]},
  {t, 0, 2 π}, PlotRange → {-1.5, 1.5}], {time, 0, 2 Pi}]
```

Out[ ]=



In[ ]:=

In[ ]:=

In[ ]:=

In[ ]:=

In[ ]:=

In[ ]:=

In[ ]:=
```
time2 = 4 Pi + 1; fps = 24; da = 1 / time2; a0 = da;
frames = Table[ParametricPlot[
   {Cos[t] + 0.4 * Sin[t + time] * Cos[20 t], Sin[t] + 0.4 * Sin[t + time] * Sin[20 t]},
   {t, 0, 2 π}, PlotRange → {-1.5, 1.5}], {time, a0, da * time2 * fps, da}]
Export["test.mov", frames, "FrameRate" → fps]
```

Out[•]=