Задание переменных и функций :
    x = 1; F[x_] := x²;
Применение функции :
    F @ x   (⇔ F[x])
    x // F   (⇔ F[x])
    F @@ {x, y, z} (⇔ F[x, y, z])
    F /@ {x, y, z} (⇔ {F[x], F[y], F[z]})
Анонимные функции :
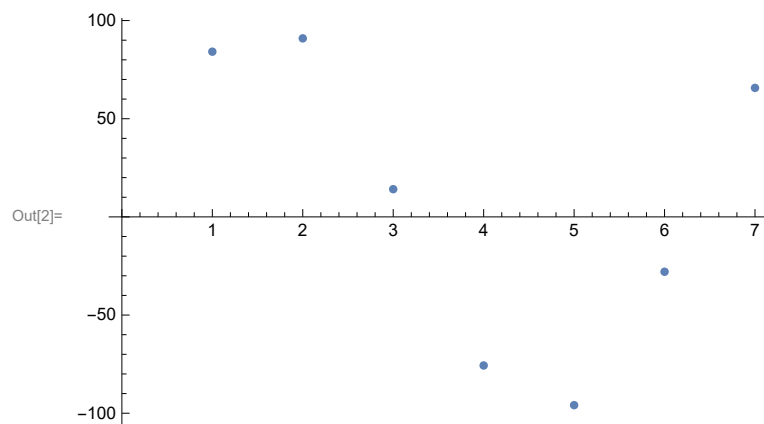   #² &   (⇔ F[x_] := x²)

Графики

In[1]:= **tab = 100 Sin /@ Range[7]**

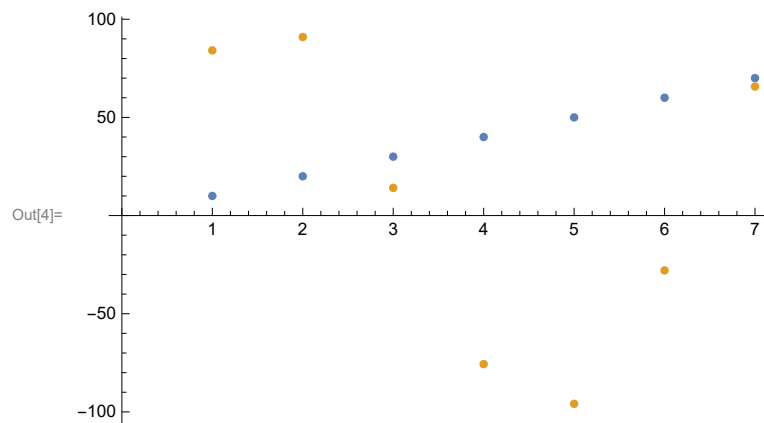Out[1]= {100 Sin[1], 100 Sin[2], 100 Sin[3], 100 Sin[4], 100 Sin[5], 100 Sin[6], 100 Sin[7]}
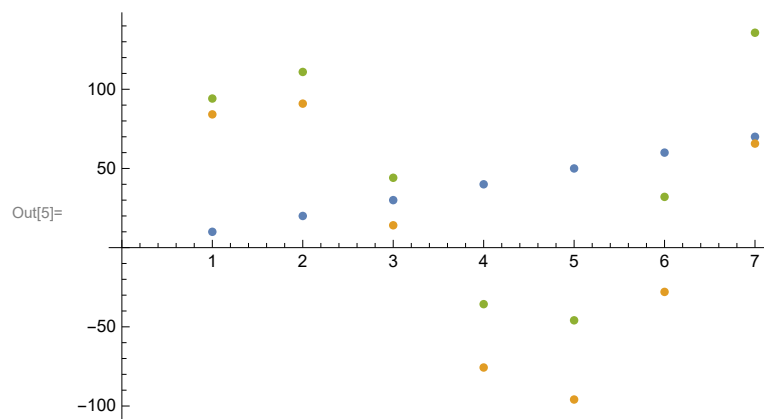
In[2]:= **ListPlot[tab]**

Out[2]=

In[3]:= **xs = 10 Range[7]**
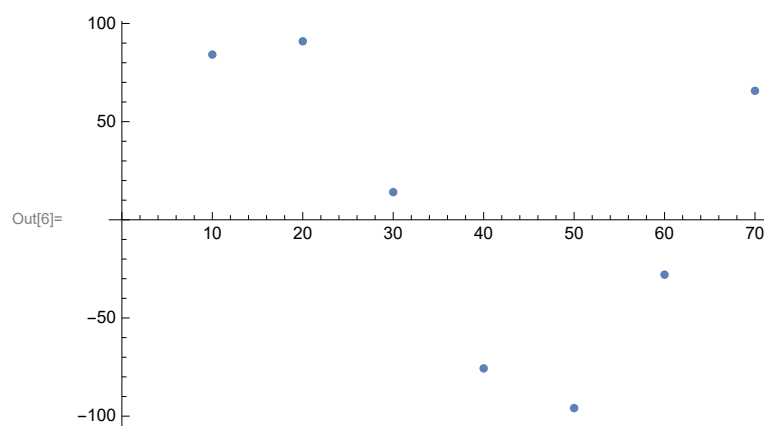
Out[3]= {10, 20, 30, 40, 50, 60, 70}

In[4]:= **ListPlot[{xs, tab}]**

Out[4]=

In[5]:= **ListPlot[{xs, tab, xs + tab}]**

Out[5]=

In[6]:= **ListPlot[{xs, tab}$^\top$]**
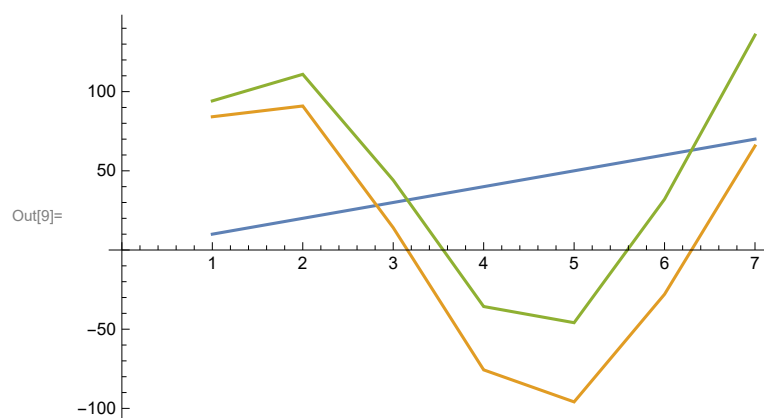
Out[6]=

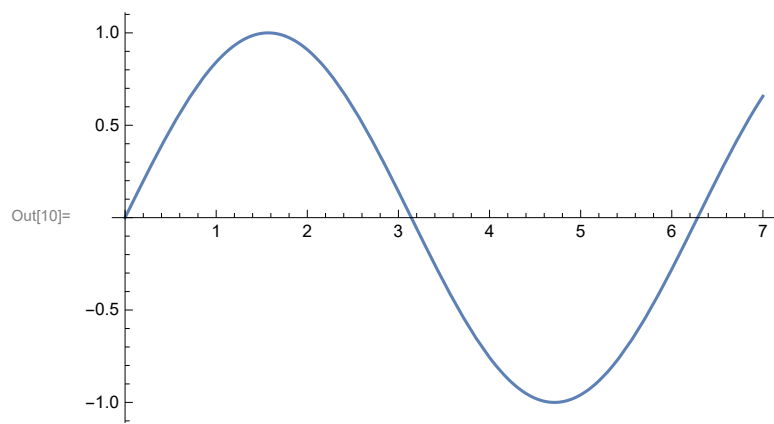In[7]:= **{xs, tab}**
{xs, tab}$^\top$

Out[7]= {{10, 20, 30, 40, 50, 60, 70},
{100 Sin[1], 100 Sin[2], 100 Sin[3], 100 Sin[4], 100 Sin[5], 100 Sin[6], 100 Sin[7]}}

Out[8]= {{10, 100 Sin[1]}, {20, 100 Sin[2]}, {30, 100 Sin[3]},
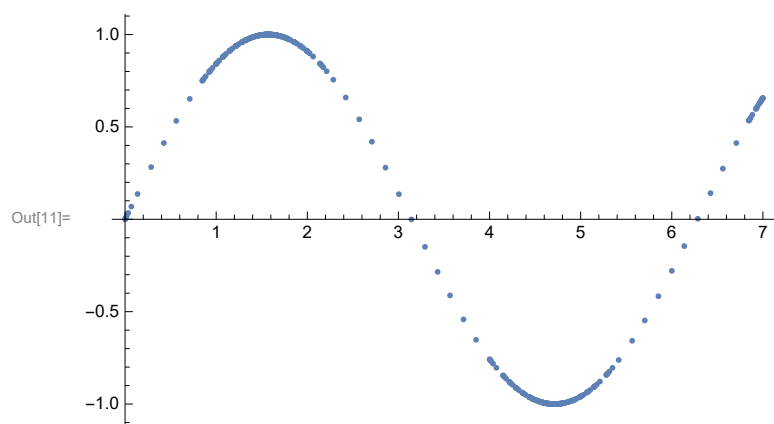{40, 100 Sin[4]}, {50, 100 Sin[5]}, {60, 100 Sin[6]}, {70, 100 Sin[7]}}
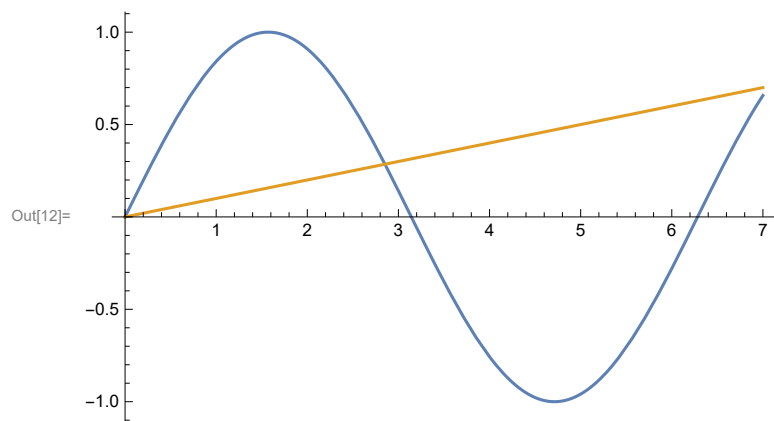
In[9]:= **ListLinePlot[{xs, tab, xs + tab}]**

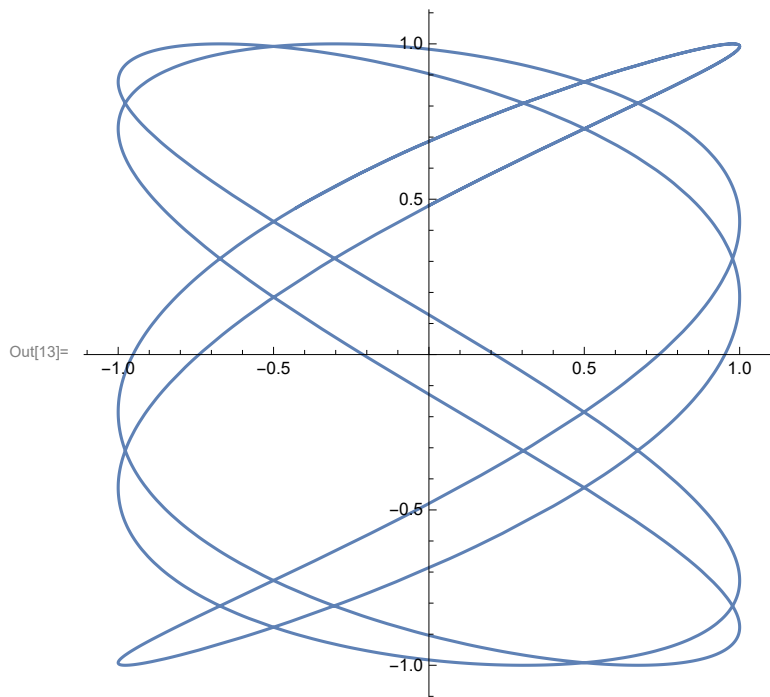Out[9]=

In[10]:= `Plot[Sin[x], {x, 0, 7}]`

Out[10]=

In[11]:= `Plot[Sin[x], {x, 0, 7}] /. Line → Point`

Out[11]=

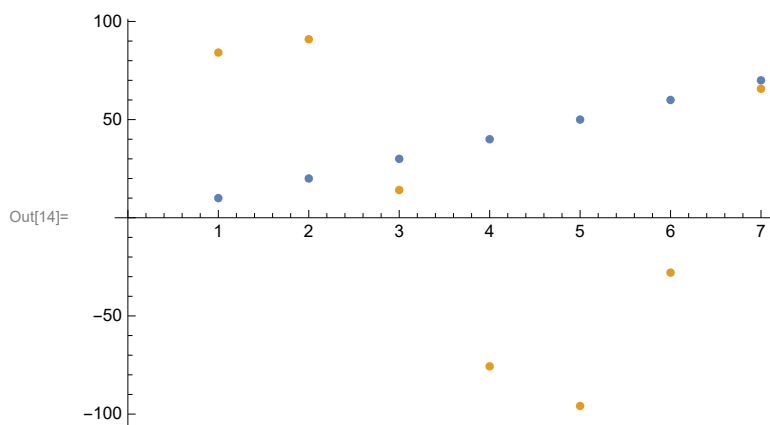In[12]:= `Plot[{Sin[x], x/10}, {x, 0, 7}]`

Out[12]=

In[13]:= `ParametricPlot[{Sin[5 t], Sin[3 t + .5]}, {t, 0, 7}]`

Out[13]=


```
Plot[]
ListPlot[]
ParametricPlot[]
ContourPlot[]
LogLogPlot[]
PolarPlot[]
...
Plot3D[]
...
```

In[14]:= **%4**

Out[14]=

Задача

In[15]:=
```
x0 = 0; y0 = 0; v0x = 1; v0y = .3;
Animate[
 ParametricPlot[{TriangleWave[x0 + v0x t], TriangleWave[y0 + v0y t]},
  {t, 0, T}, PlotRange → {{-1, 1}, {-1, 1}}]
 ,
 {T,
  1,
  10}]
```

Out[16]=