In[23]:=
```
x0 = 0;
y0 = 0;
R = 1; (*promien kulki*)
c = 0.25 * 10^-4 * R;
b = 1.6 * 10^-4 * R;
```

In[5]:=
```
m = 1; g = 9.81;
```

In[28]:=
```
eq1 = -c * Sqrt[x'[t]^2 + y'[t]^2] * x'[t] - b * x'[t]
```
pierwiastek kwadratowy

Out[28]=
$$-0.00016\,x'[t] - 0.000025\,x'[t]\,\sqrt{x'[t]^2 + y'[t]^2}$$

In[29]:=
```
eq2 = -m * g - c * Sqrt[x'[t]^2 + y'[t]^2] * y'[t] - b * y'[t]
```
pierwiastek kwadratowy

Out[29]=
$$-9.81 - 0.00016\,y'[t] - 0.000025\,y'[t]\,\sqrt{x'[t]^2 + y'[t]^2}$$

In[46]:=
```
tmax = 20;
```

In[47]:=
```
sol = NDSolve[{x''[t] == eq1, y''[t] == eq2,
   y'[0] == 23.0, x'[0] == 19.0, x[0] == 0, y[0] == 0}, {x, y}, {t, 0, tmax}]
```
rozwiąż numerycznie równanie różniczkowe

Out[47]=
```
{{x → InterpolatingFunction[  ],
  y → InterpolatingFunction[  ]}}
```


In[34]:=

In[48]:=
```
ParametricPlot[{x[t], y[t]} /. sol, {t, 0, tmax}]
```
wykres parametryczny

Out[48]=