In [1]:
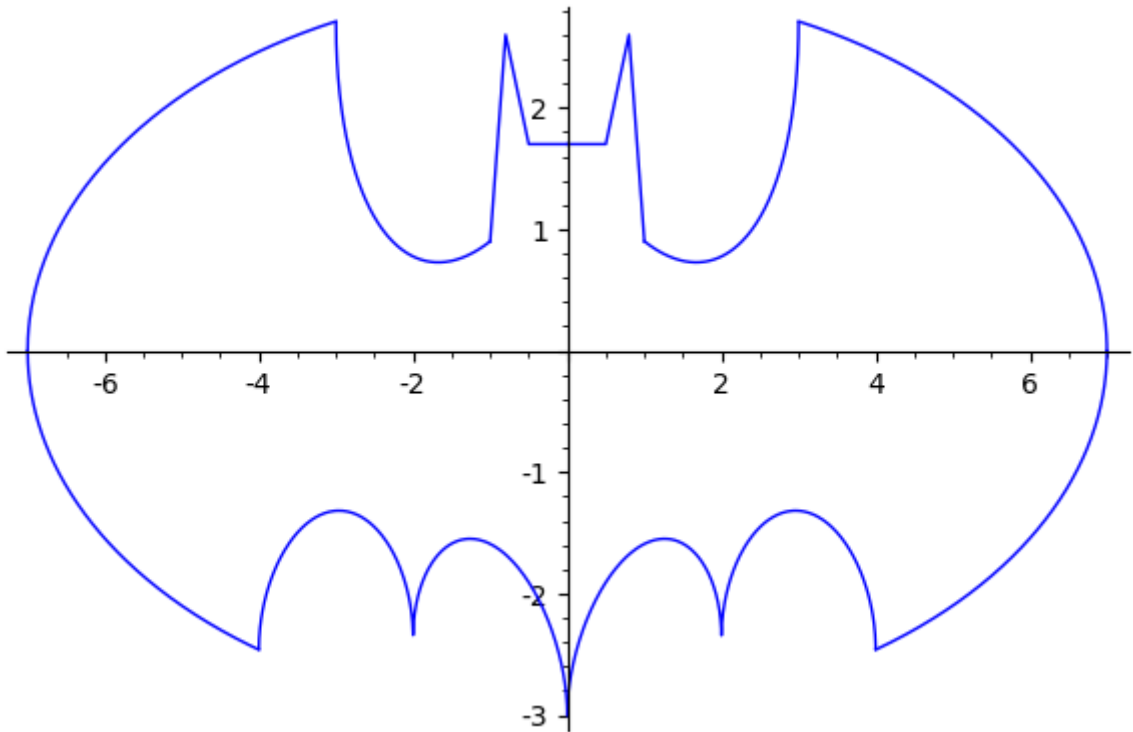```
these codes are from the site "share.cocalc.com"
there is a page "batman-curve.sagews"
#
sf(x) = sqrt(1-x^2)   # semicircle
ef(x) = 3*sf(x/7)   # ellipse
sh(x) = 4.2 - .5*x -2.8*sf(.5*x -.5)   # shoulders
bf(x) = sf(abs(2 - x) - 1) - x^2/11 + .5*x -3   # bottom
cl   = [(0,1.7), (.5,1.7), (.8,2.6), (1,.9)]   # cowl right
cl2   = [(-x,y) for (x,y) in cl]   # cowl left

def p(f,xmin,xmax):
    "symmetric plot across y-axis"
    p1 = plot(f,xmin,xmax)
    p2 = plot(lambda x:f(-x),-xmax,-xmin)
    return p1 + p2

p(ef,3,7) + p(-ef,4,7) + p(sh,1,3) + p(bf,0,4) + line(cl) +line(cl2)
```

Out[1]:



In [0]: