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In [53]:  from sympy import *
          from sympy.plotting import (plot, plot_parametric)
```

#1 Maximize and Minimize area of wire shapes

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In [58]:  
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e wire should be divided so that the wire length of the square is" ,mnX, "cm
e wire should be divided so that the wire length of the square is 0 cm and the

So that the total area enclosed by the two is a minimum, the wire should be divided so that the wire length of the square is $[120/(\pi + 4)]$ cm and wire length of the circle is $30 - [120/(\pi + 4)]$ cm.
So that the total area enclosed by the two is a maximum, the wire should be divided so that the wire length of the square is 0 cm and the wire length of the circle is 30 cm.

#2 Maximum and minimum percent error

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In [ ]:  
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#3a Initial Value Problem

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In [ ]:  
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#3b Boundary Value Problem

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In [ ]:  
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