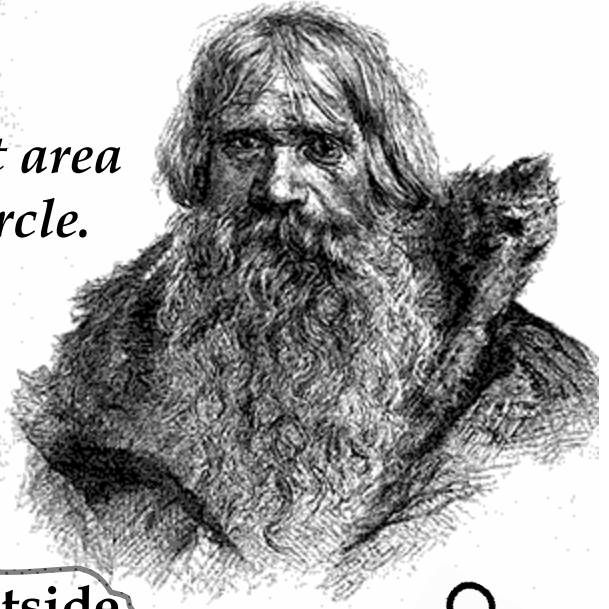


# *“How much land does a man need?”*

*Tolstoy wrote a story of Pahom, a Russian peasant, who made a deal to buy as much land as he could walk around in a day. In his greed, he ended up dying of exhaustion by the time he got back to the start.*

*The shape that gives the greatest area for the smallest perimeter is a circle.*



*The perimeter of a circle is called the circumference:*

$$C = 2\pi r$$

*This is the length around the outside*

*The area of a circle is:*

$$A = \pi r^2$$

*This is the space inside*

$$\pi =$$

3.14159265358979  
323846264338327  
9502884197169399  
3751058209749445...

*But 3.14 is usually enough*

