

Click on the SETTINGS button. The X-AXIS goes from -16 to 16. The Y-AXIS goes from -16 to 16. So the area of the entire turtle grid is 33 \* 33 = 1089 patches. The area is 33 \* 33 = 1089 patches. The area is 33 \* 33 = 1089 patches.

Using Monte Carlo, determine the estimated AREA of the above circle. What is given? 66 and 134 and 200 are the numbers that are given. Also, 1089 is another given from multiplying the 33 rows and 33 columns to get 1,089 square patches as the AREA.

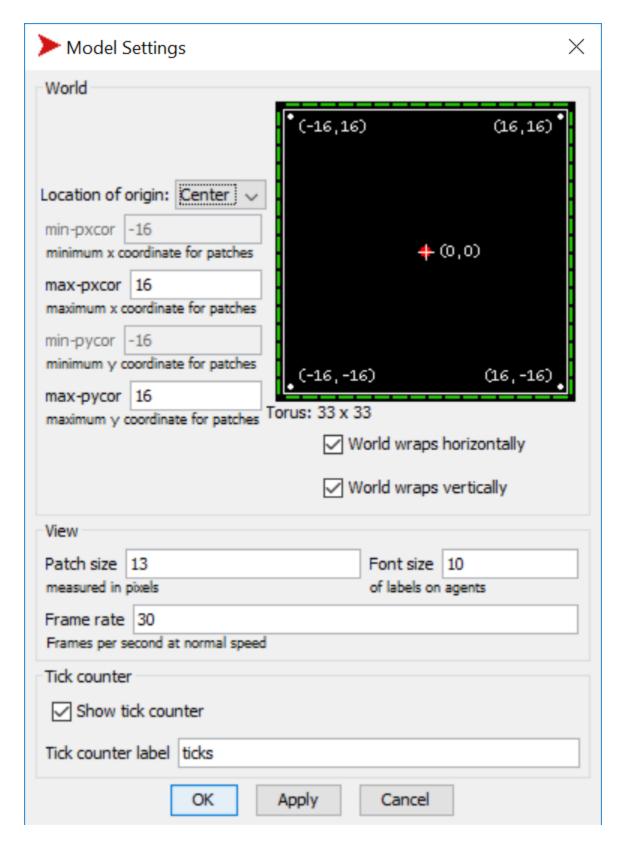
What is the GOAL, the UNKNOWN, the RESULT you are trying to determine or discover or find out? That is the AREA of the circle.

See <a href="http://www.cs.uni.edu/~jacobson/025/f/MonteCarlo11">http://www.cs.uni.edu/~jacobson/025/f/MonteCarlo11</a> 14 2012.pdf and study AAA, BBB, CCC and DDD carefully in order to solve the problem. You know b, c, and d. You are trying to find a. See the formula. The formula is the way to get from the given input or known facts to the goal, the desired output or answer.

```
MonteCarlo - NetLogo (C:\1025)
                                                             X
File Edit Tools Zoom Tabs Help
Interface Info Code
                Procedures ▼

✓ Indent automatically

Find... Check
breed [ cats cat ]
breed [ cows cow ]
TO darts
   ca
   ask patches [ set pcolor white ]
   cro 1
   ask turtles
      pd
     fd 10
      rt 90
      repeat 180
        fd (2 * 3.14159265 * 10) / 180
        rt 2
        wait 0.02
      die
   ]
   cro howManyTurtles
   ask turtles
   Γ
      setxy random-xcor random-ycor
      ifelse sqrt ( xcor * xcor + ycor * ycor ) < 10
         hatch-cows 1 [ set color blue set shape "cow" ]
         hatch-cats 1 [ set color red set shape "cat" ]
      die
END
```



Torus 33 by 33 with max-pxor of 16 and max-pycor of 16.

 $33^2 = 1,089$  ... an

... and the world wraps!