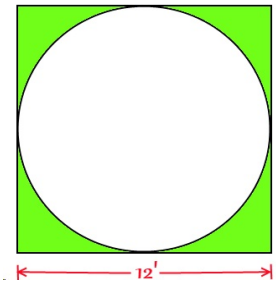
Math 5710 Monday, 7/27/20 Quiz 24

1. What is your name?

2. A circle is inscribed in a 12' by 12' square. An experiment is conducted in which a very sharp pin randomly pricks the interior of the square. For each of the following events, predict the probability that it occurs; display the comutation:

   A. A point in the interior of the square is pricked but it is not in the interior of the circle.

   $(144 - 36\pi) \div 144 \approx 0.2146$

   B. A point on the circle is pricked.

   0

   C The center of the circle is pricked.

   0

   D. A point in the interior of the circle is pricked.

   $36\pi \div 144 \approx 0.7854$

   E. A point in the interior of the square is pricked.

   1

Side bar computation:

The radius of the circle is 6, so the area of the interior of the circle = 36π.

The area of the interior of the square is 144.

The area of { points in the interior of the square } – { points in the interior of the of the circle } = $144 - 36\pi$

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3. Smile.