Math 5710 Monday, 7/27/20 Quiz 24

1. What is your name?

Brock Francom

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 computation:

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

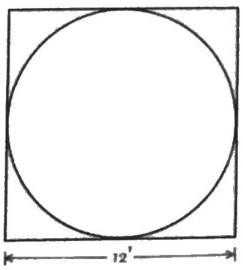
$P(X) = \frac{144 - 36\pi}{144} = .2146$

B. X = A point on the circle is pricked.

$P(X) = 0$

C X = The center of the circle is pricked.

$P(X) = 0$



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

$P(X) = \frac{36\pi}{144} = .7854$

$A_s = 12 \cdot 12 = 144$

$A_c = \pi r^2 = \pi 6^2 = 36\pi$

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

$P(X) = 1$

3. Smile.