DoNow – Coin Toss Game

1. The coin toss game has a player throw a coin onto a table with a grid of congruent squares painted on the table top. You win if your coin lands inside a square (without touching a line). Assume S is the length of a side of a square and R is the radius of the coin.

   (a) Find the probability of making a prize winning toss (in terms of R and S).

   (b) Explain how you model the *sample space*.

   (c) What assumptions are you making?

   (d) How do you model the *event space*?

Another Probability Question – Dropping nails

2. *Dropping Nails*

   Suppose we have a floor made of parallel strips of wood, each the same width, say w. Now drop carpenter's nails of length l onto the floor.
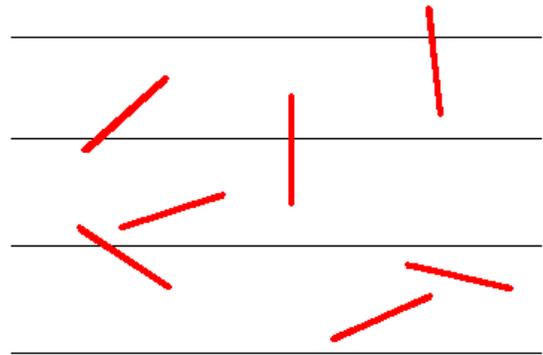

   Diagram shows a small sample

   • Assuming $l = w$ what is the probability that a nail crosses a line between two strips?

DoNow – Coin Toss Game

1. The coin toss game has a player throw a coin onto a table with a grid of congruent squares painted on the table top. You win if your coin lands inside a square (without touching a line). Assume S is the length of a side of a square and R is the radius of the coin.

   (a) Find the probability of making a prize winning toss (in terms of R and S).

   (b) Explain how you model the *sample space*.

   (c) What assumptions are you making?

   (d) How do you model the *event space*?

Another Probability Question – Dropping nails

2. *Dropping Nails*

   Suppose we have a floor made of parallel strips of wood, each the same width, say w. Now drop carpenter's nails of length l onto the floor.
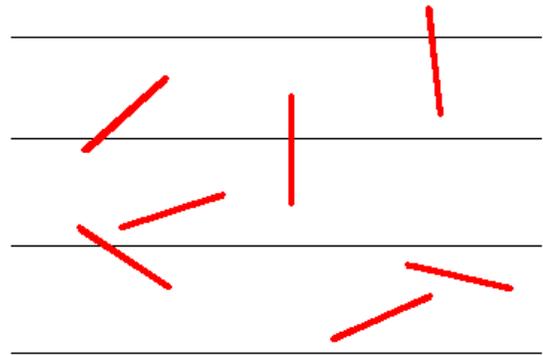
   Diagram shows a small sample

   - Assuming $l = w$ what is the probability that a nail crosses a line between two strips?