

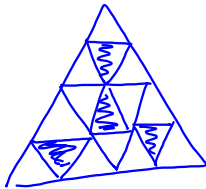
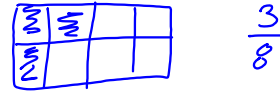
9.4 Geometric Probability

$$\text{Probability} = \frac{\text{Part (favorable)}}{\text{Total}}$$

Geometric = area

Probability of a given space

$$\text{Probability} = \frac{\text{favorable area (target)}}{\text{total area}}$$



$$\frac{4}{16} = \frac{1}{4}$$

In a 9m football field.
The logo covers a section
that is 120 square feet

$$P(L) = \frac{120}{4000} = 0.03$$



Prob of hitting center

$$A = \pi r^2 \quad \text{center}$$

$$A = 24^2 \pi \quad A = 3^2 \pi$$

$$A = 576 \pi \quad A = 9 \pi$$

$$P(C) = \frac{9 \pi}{576 \pi} = \frac{9}{576}$$

$$P(C) = 0.016$$

Shaded Angles in a circle

