

January 2026

Title

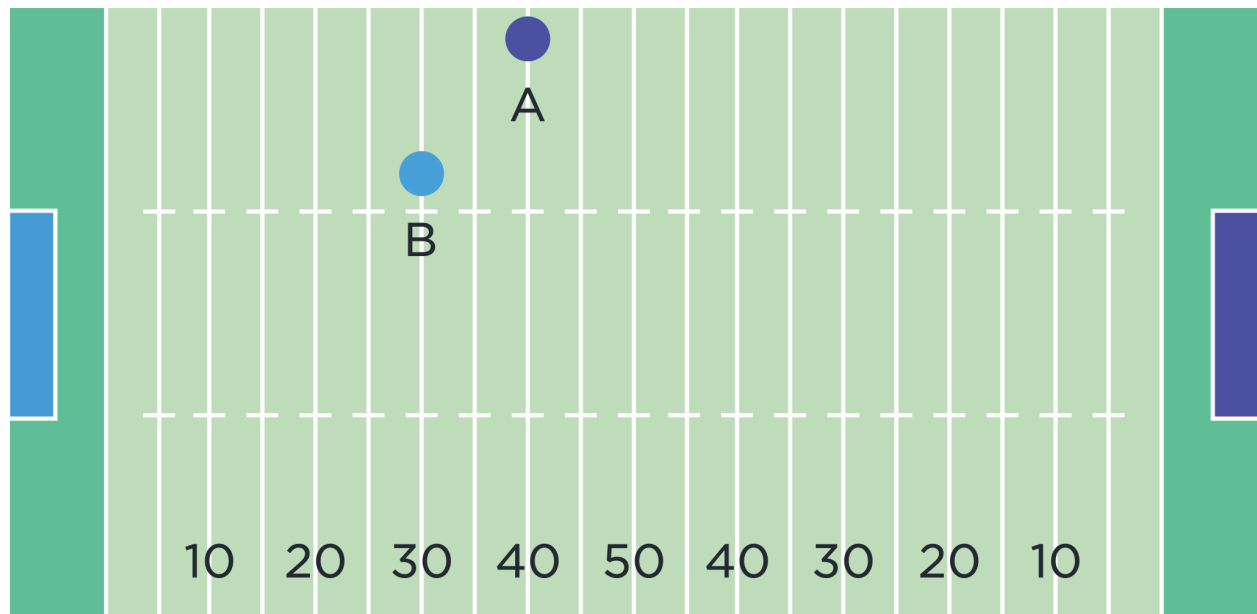
Football Theory

Real world event

College football finals in January, gearing up for Superbowl at the start of February

Problem

Person A just caught the football! There is only one defender (Person B) between A and the end zone. Assume both players are equally fast, and very agile, and that if Person B reaches Person A, then the tackle is definitely successful.



What direction should Person A start running in?

What is the farthest-left yard line that Person A can definitely reach, no matter what strategy Person B uses? How and why?

What is the farthest-right yard line that Person B can ensure Person A never crosses, no matter what strategy Person A uses? How and why?

How would you figure out the answer in general, if Person A and Person B started at different positions?

This is a real-world example of Game Theory. There is a huge space of possible strategies for each player to consider.