

The play that won the Giants Super Bowl XLII: The Giants are 14 yards from the end zone. The ball is on the right hash mark (located 3.08 yards to the right of the middle of the field) with only 39 seconds left on the clock. The play that has been called by offensive coordinator, Kevin Gilbride is a “*Fade Pattern*” to the back left hand side of the end zone to Plaxico Burrell. In the “*Fade Pattern*” the Giants *always* throw to the spot that is five yards deep into the end zone and 2 yards from the sideline. Prior to the snap of the ball, Plaxico Burrell lines up 7 yards from the left sideline and one yard behind the line of scrimmage. Eli Manning lines up in a “shotgun formation” 4 yards behind the center, Shaun O’Hara. After receiving the snap Eli Manning takes a couple of steps straight back from the center and ends up 6 yards behind the line of scrimmage. Simultaneously, Plaxico Burrell runs at half speed straight up the field (perpendicular to the line of scrimmage) until he reaches the goal line 15 yards away. Exactly at the goal line this pattern has him cutting at a 45° angle to the left and running towards the back of end zone at full speed on this part of the route awaiting the football from his quarterback Eli Manning. Before we begin solving the problem we have the students watch this specific play from Super Bowl XLII

(<http://www.nfl.com/videos?videoId=09000d5d8067d424>).