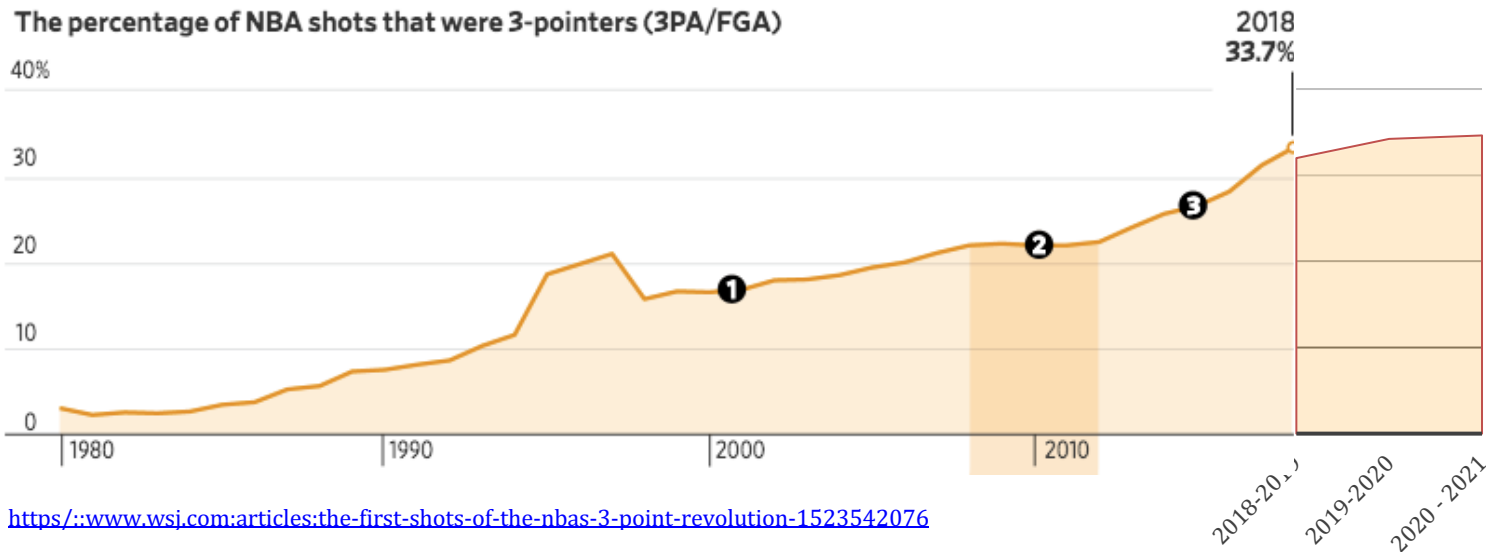


For Three!

1. The NBA game has changed dramatically over the past several years. Teams are shooting more three point shots and at a higher percentage than ever before. The Cleveland Cavaliers and Golden State Warriors met for four straight years in the NBA Finals and both teams relied heavily on the three to get them there and dominate the league. Take a look at the graph below and make at least two mathematical observations .

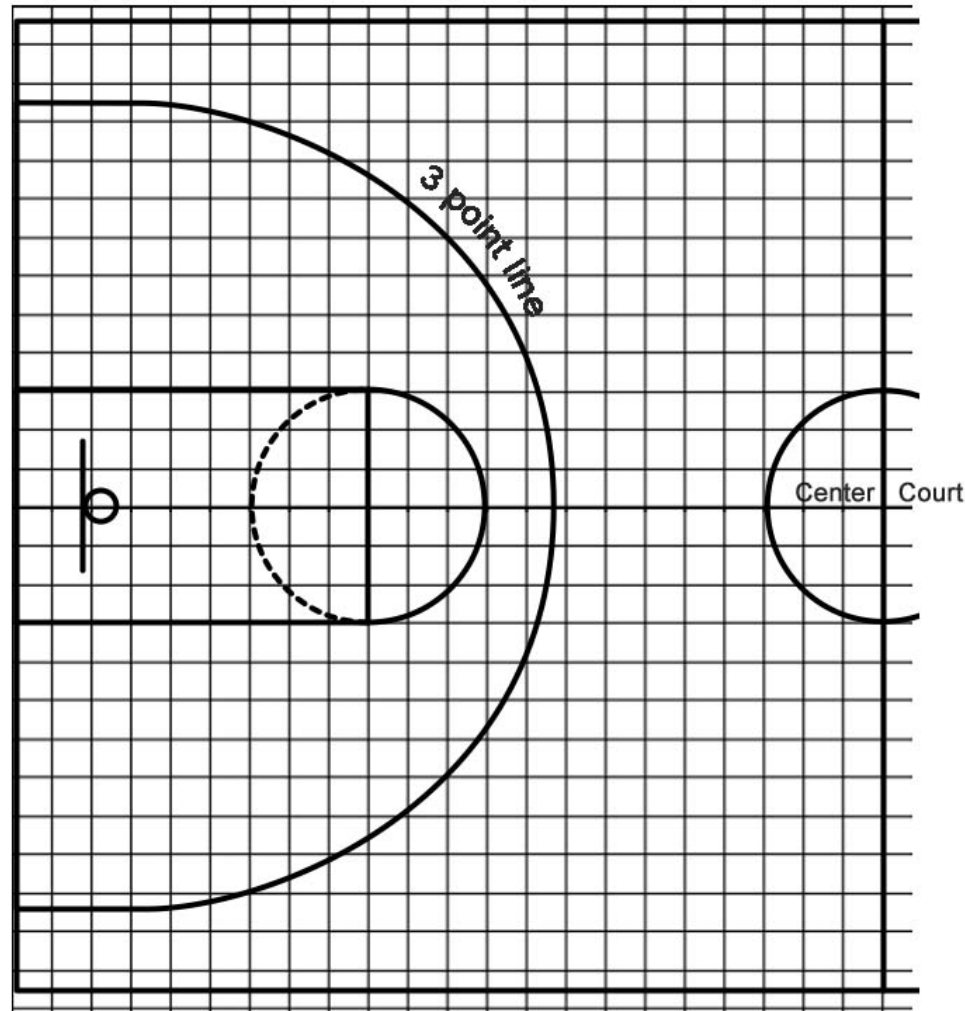
The Revolutionary Warriors

How the NBA learned to love 3-pointers



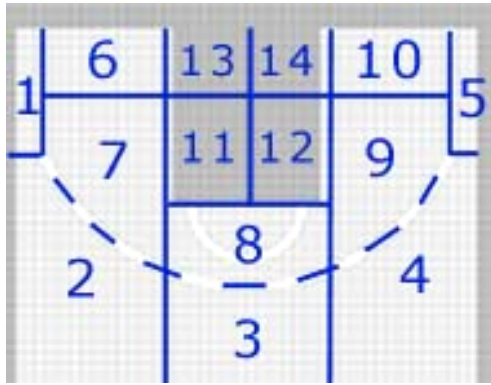
2. Are all shots created equal? On the following page is a scale model of a basketball court. The three point arc is the giant, almost half circle surrounding the basket. Use your geometry skills to approximate the distance from places along the three point line. Be sure to label and give the distance in feet for each spot on the three point line that you found. Are all shots along the three point arc the same distance? If not, where would you find the shortest three point shots?

NBA half-court



Scale: One box has dimensions 2 feet by 2 feet

3. The picture below shows the different zones on a basketball court. Here are the field goal percentages for each three point zone.¹ How do the shooting percentages compare with the court distances for each type of shot? Considering the distances and data does this make sense?



<http://82games.com/locations.htm>

1 and 5 corner 3's - 42.5%

2 and 4 wing 3's - 34.9%

3 straight up 3's - 38.8%

4. Should teams shoot 3's or 2's? As of 2016 teams were making 35% of three point shots while making 49% of two point shots.² With those percentages and shot values, which should get you more points over time – a two or a three? Defend your reasoning.

5. Steph Curry has made 43.3% of his 3's over his career (as of 2021). Shaquille O'Neal made 58.3% of his 2's over his career.³ Which player scores more on average per possession?

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¹<http://82games.com/locations.htm>

²<http://www.businessinsider.com/nba-three-point-shooting-2016-3>

³ <https://www.basketball-reference.com/>

Source: <https://www.teamrankings.com/nba/stat/three-pointers-attempted-per-game?date=2006-06-21>