

Fantasy Football?



We are in the midst of another exciting NFL season. Aside from the actual football games being played, a relatively new game based on the NFL is becoming increasingly popular. Fantasy football is played by an estimated 25 to 30 million people each year. To play, contestants form a league and have a draft to form their own teams comprised of NFL players. Each person in the league typically drafts an NFL quarterback, running backs, wide receivers and so on. The more offensive production out of your players, the more points you get. League scoring systems vary, but for example a quarterback could earn you six points for each touchdown pass, 0.05 points for every passing yard and -2 points for each interception. Websites such as ESPN.com and Yahoo Sports host millions of fantasy football players. These websites use formulas to compute the number of points each player and team totals in an NFL weekend. In this activity we will learn about the scoring formulas through some of the biggest fantasy days in recent history.

Let's look at an example with the quarterback scoring:

Touchdown (Pass or Run) = 6 points

Passing Yard = 0.05 points

Interception = -2 points

1. In week one of the 2011 – 2012 season Tom Brady threw four touchdowns, 510 passing yards and one interception. Find the number of fantasy points Tom Brady has scored in this week. Show your work or reasoning below:
2. In week six of the 2013 season Nick Foles, threw seven touchdown, had 406 passing yards and zero interceptions. Find the number of fantasy points Nick Foles scored in this week. Show your work or reasoning below:
3. Look back at your method for the previous two problems. Write a formula that gives the points (p) for any number of touchdowns (t), passing yards (y), and interceptions (n).
4. A quarterback threw for 180 yards, three interceptions and had 15 total points. Use your rule to find the number of touchdown passes this quarterback threw for.

5. A quarterback had a total 35 fantasy points. He had four touchdowns, one interception and 35 total points. Use your rule to find the number of passing yards this quarterback threw for.
6. A quarterback had 18 total fantasy points. He had one touchdown pass and 320 passing yards. Use your rule to determine how many interceptions the quarterback threw.

Different Scoring for Different Positions:

Some leagues use the following scoring system for a wide receiver and tight end:

Receptions = 0.2 points
Receiving Yards = 0.1 point
Touchdown = 6 points
Fumble = -2 points

7. In week eight of the 2013 season Calvin Johnson had 14 receptions, 329 receiving yards, zero fumbles and one touchdown. How many fantasy points did Calvin Johnson score in this game? Show your work or reasoning below:
8. In week nine of the 2013 season Brandon Marshall had seven receptions, 139 receiving yards and two touchdowns. Do you think he outscored Calvin Johnson's total from the previous problem? Make a guess, then find Brandon Marshalls total fantasy points from this game. Show your work or reasoning below:
9. Look back at your reasoning from the previous two problems. Write a rule that calculates the number of fantasy points for a wide receiver. Explain what each part of your rule represents.
10. The wide receiver on my fantasy team scored 24 fantasy points on Sunday. Find various combinations of receptions, receiving yards, touch downs and fumbles that would total 24 fantasy points. Clearly show your work and be sure to come up with more than one possibility.

Some leagues use the following scoring system for a running back:

- Receptions = 0.2 points**
- Receiving Yards = 0.1 point**
- Rushing Yard = 0.1 point**
- Touchdown = 6 points**
- Fumble = -2 points**

11. In week seven of the 2011 NFL season, which running back scored more fantasy football points?
- Arian Foster, had 120 yards receiving, 5 receptions and 2 touchdowns and 115 rushing yards.
 - Demarco Murray, had 253 rushing yards, zero fumbles, zero receiving yards, zero passing yards and one touchdown.
12. Write an algebra expression that gives the total points scored by any player for any number of p passing yards, r rushing yards, v receiving yards, c receptions, t touchdowns and f fumbles or interceptions.