**Soccer**

**Part 1:**

In your groups, pool your knowledge about soccer. Answer the question: How is math used in soccer?

* Write 3 sentences with 3 examples of how math is used in soccer.

Ex.: A soccer player uses math to \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

 A soccer coach uses math to \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

**Part 2:**

A soccer player runs at different speeds during the course of a game. What makes a soccer player sprint versus jog?

* Write 2 sentences about what makes a person run at different speeds during a soccer game.

Ex.: A soccer player sprints when \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

 A soccer player jogs when \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

**Part 3:**

Hypothesize how far a professional soccer player runs during a game on average.

* Write 1-2 sentences on how far you think and why. Defend you hypothesis with some kind of evidence that you find online.

**Part 4:**

On average a professional soccer player sprints $\frac{3}{4}$ of a mile every game. However, a soccer player sprints only $\frac{1}{10}$ of his or her total running in the game. The other portion of the running is slower than his or her top speed. How far does a professional soccer player run altogether in a soccer game?

* Write an equation and solve for the variable. Make sure to label what each part represents.
* Write 1 sentence about what the answer means.
* Does this seem like a reasonable answer?