

Math Challenge #4



First Name: _____	Last Name: _____	Grade: _____
Teacher: _____	Parent's email: _____	

Sports and Games anyone?

Sports and games are sometimes played purely for entertainment, but sometimes for achievement or reward as well. They can be played alone, in teams, or online; by amateurs or by professionals. In any sport or game, we normally play to win. The Math Challenge #4 presents you with problems around sports and games. Sometimes, winning or losing does not matter too much if we play to have fun.



Kinder & First Grade: solve at least 3 problems.
Second & Third Grade: solve at least 6 problems.
Fourth Grade and above: solve at least 12 problems.

Answer

1.	The basketball team has 15 players on the roster. There are 6 other players who are ready to join the team. If the 6 other players join the team, how many players are there in all?	
2.	The 'Dare Devil' soccer team won 8 games, lost 5 games, and had 3 ties this season. How many games did the 'Dare Devil' soccer team play?	
3.	Ron bought 2 dozen golf balls before the season started. At the end of the season, he only had 17 balls left. How many golf balls did Ron lose?	
4.	 Andy scored 14 goals, Carlos scored 9 goals and Dan scored 12 goals this soccer season. How many goals did the boys score in all?	
5.	To prepare for swim team tryouts, Leann swam in the pool every morning before school. On Monday, she swam for 24 minutes. On Tuesday, she swam for 18 minutes. On Wednesday, Thursday, and Friday, she swam for 30 minutes each day. She took a break on both Saturday and Sunday. How many minutes did Leann swim this week? 	
6.	Amy, Saranya, Tina and 12 other teammates played soccer in a team. The three girls scored half of the goals last season. Amy scored 12 goals, Saranya scored 7 goals and Tina scored 9 goals. How many total goals did the team make last season? 	
7.	 The top basketball player at High Five High school scored 15 two-point baskets, 2 three-point baskets, and 4 free throws worth 1 point each. How many points did the top player score in the game?	

8. A group of Rainer Elementary students went on a field trip to see the baseball game. They took 6 vans and 8 buses. There were 7 people in each van and 24 people in each bus, and all of them went to see the game. How many people went to the baseball game?

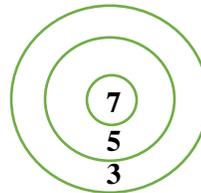
9. Maya scored 8 more points than Jenny in the basketball game, and their scores together made up half of the team's total scoring. The total score was 112. How many points did each score?

10. Joseph is a runner specializing in the 400-meter event. If the USA record for the 400 meter is 45.13 seconds and Joseph ran it in 45.99 seconds, then Joseph needs to greatly improve to match the record. How much faster (in seconds) does Joseph have to run to tie the record?



11. The first month when Henry trains for a marathon, he runs 2.5 miles each day. Every month he runs one mile farther per day than the month before. If this pattern continues, how many miles total will he be running after a six-month, July through December, training?

12. During practice, Dana's six arrows land on the target shown. Each arrow is in one of the regions of the target. Which of the following total scores is possible: 44, 41, 31, 26, 19, 16?



13. In a game named Hoopla Ball, a field goal is worth 2 points and a foul shot is worth 1 point. Suppose a team scored 72 points and made 6 more field goals than foul shots, how many foul shots did the team make?

14. Andre is a football referee who refs a game seven days a week during the season. Because of his schedule, he can take his striped shirts to the cleaners only one day a week. He takes them in on Monday and picks them up on Tuesday evening after work. If he wears a different striped shirt every day of the week, what is the fewest number of shirts he would need to make it through the season?



15. The Kennewick High basketball team played 9 games during last year's basketball season. The table below shows the results.

Game	Total Points	W-Won, L-Lost
1	100	W
2	105	L
3	50	L
4	120	W
5	98	L
6	100	W
7	120	W
8	70	L
9	120	W

- What is the average (arithmetic mean) of the total points for Kennewick team?
- What percent of the games did they win?

a.

b.

16. Baseball uses a lot of statistics. Look in the sports section of the Washington Post newspaper and you will probably see lots of stats during baseball season. **“PCT”** is a popular stat: it **is the % of games won in decimal form**. PCT usually has three decimal places. A Team X played 78 games of which 43 games were won and 35 were lost, what is the PCT of Team X?

17. Given the following clues, find out the number of gold, silver and bronze medals that France, Italy and Japan got in this international sports competition?

- Japan has 1 more gold medal, but 3 fewer silver medals, than Italy.
- Japan has 6 silver medals.
- France has the most bronze medals (18), but fewest gold medals (7).
- Each country has at least 6 medals of each type.
- Italy has 27 medals in total.
- Italy has 2 more bronze medals than gold medals.
- The three countries have 38 bronze medals in total.
- France has twice as many silver medals as Italy has gold medals.

Solution is available on November 16, 2018 at www.mathinaction.org

Don't miss the [Math Challenge Tournament!](#)