

The Sky Sox Math Youth Day
Mound Master Competition
(this version does NOT contain answers to questions)

Mound Master is the pre-game single-elimination tournament which determines the Sky Sox Math Youth Day fan who gets to throw out the ceremonial first pitch.

The rules of the Math Day Mound Master Competition: Eight students start the competition. Students are initially divided into four groups of two. The emcee will ask a question to each pair of students. The emcee will ask for the answer from the first student who raises her or his hand. If the answer is correct, then that student wins the round and moves on to the next round, and the other student is eliminated from the competition. If the answer is not correct, then the other player has ten seconds to give an answer. If the second player's answer is also incorrect, or the second player gives no answer, then the winner of the round will be the student whose answer was closest to the actual answer.

The second round consists of four students (two pairs). The third (final) round consists of two students. The Mound Master winner is the student who wins all three rounds.

Quarterfinal (Round of 8) Questions

(Use any FOUR of these ...)

- 1) The average height of a baseball player is 6 feet, 1 inch. How many inches is that?
- 2) If a batter hits a home run, he has to run 360 feet to go all the way around the bases. If the batter had only hit a single instead, how far would he have to run?
- 3) Sox the Fox is the Sky Sox mascot. Every time Sox takes a step, he goes 5 feet. The dugout on which Sox often walks is 100 feet long. If Sox walks from one end of the dugout to the other, and then back to his starting point, how many steps does he take?
- 4) Last season, Danny Ardoin of the Sky Sox hit a home run that traveled 450 feet from home plate. How many yards is that?
- 5) The Sky Sox expect 4,000 people to come to the game today. If the Sky Sox average this many fans for each of their remaining sixty home games, how many people will come to see the Sky Sox play between now and the end of the season?

Semifinal (Round of 4) Questions

(Use any **TWO** of these.)

- 1) **Rick the Peanut Seller can sell 15 bags of peanuts each inning. Rick can quit working as soon as he has sold 100 bags of peanuts. In what inning can Rick quit working?**
- 2) **In this contest we are running a 3-round, single-elimination tournament, with Quarterfinals, Semifinals, and Finals. We had eight players. If we had instead run a FOUR round, single elimination tournament, how many players would we have had?**
- 3) **The Sky Sox play at the “Triple A” level of baseball. It’s only one step from Triple A to the Major Leagues (that’s the level where the Colorado Rockies play). Over the years, a large percentage of players who have played for the Sky Sox have gone on to play in the majors. The Sky Sox currently have 24 players. If 75% of the players on the current roster go on to the majors, how many future major leaguers are currently on the roster?**

Final Round Questions

(Use **ONE** of these.)

- 1) **The teams in major league baseball each have 25 players. The total amount of salary that the Rockies will pay to the entire team during the 2006 season is around \$50 million. When Rockies Manager Clint Hurdle gives the starting lineup to the umpire before the game, how much total salary (on average) is being paid to the people on that list?**
- 2) **There are 30,000 kids in Colorado Springs who are signed up to play youth baseball, and 20,000 kids in Colorado Springs who are signed up to play youth soccer. But 4,000 kids are signed up to play BOTH baseball AND soccer. So how many kids in Colorado Springs play AT LEAST ONE of the two sports?**