

Small Number and the Basketball Tournament

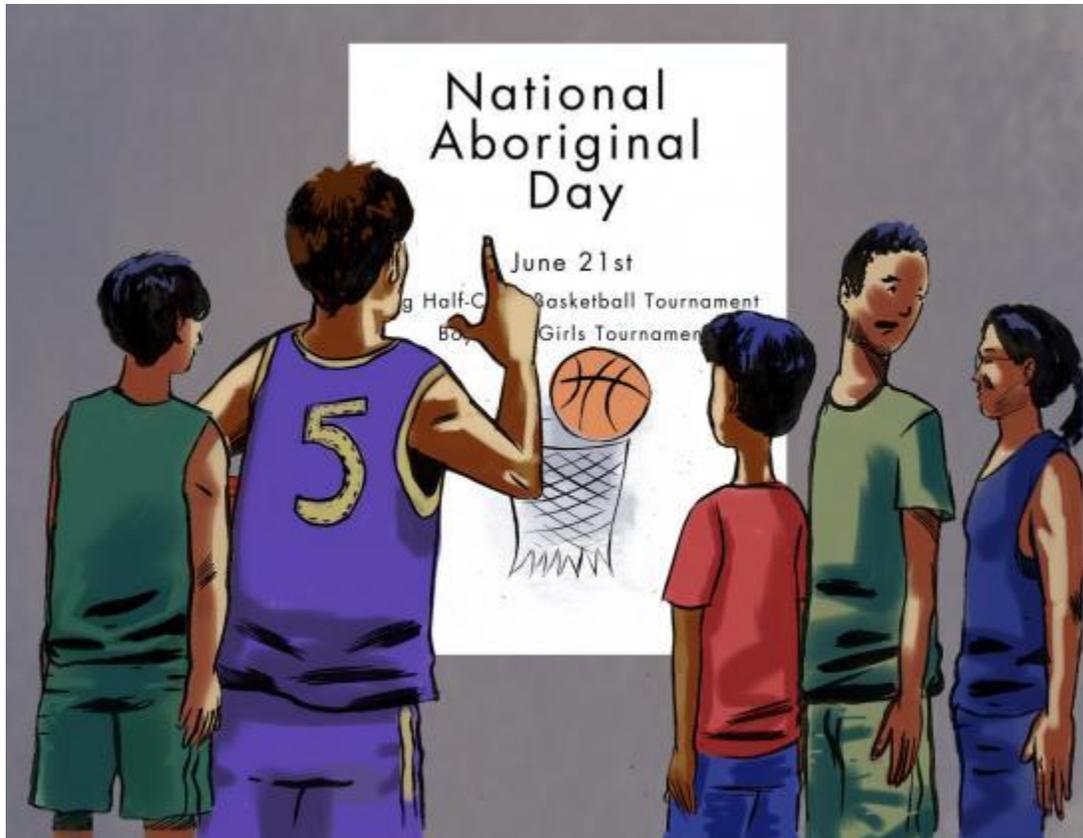
Story Transcript: English



Small Number is a young boy who gets into a lot of mischief. He lives in a big city with his mother and his older sister Perfect Number. Twice a week, after school, he goes with his friends to the Aboriginal Friendship Centre. There the boys first have a snack and then they do mathematics for half an hour. Sometimes they do algebra in their workbooks, but usually they play mathematical games. Small Number's favorite game is "Set." He enjoys finding patterns faster than anyone else!



What the boys like the most is playing basketball in the Centre's gym. There are four basketball hoops in the gym, which allows each group of players to use just a fraction of the court. Small Number is the shortest boy in his group, but he is very fast. He tries hard to be as good a player as his best friend Big Circle, who is the biggest boy on the team.



A big half-court basketball tournament will happen on Aboriginal Day and the boys want to enter it. Each team must have six players, but only three players are allowed on the court at one time. There are only five boys in Small Number's group of friends. The boys start talking about who they might ask to be their sixth player. Big Circle says, "*We need somebody who is tall, fast, and a good shooter!*" All the boys agree, but they can't think of anyone to join their team.



When Small Number comes home, his mom notices that he is quieter than usual. “*What happened?*” she asks. After listening to Small Number’s explanation, mom smiles: “*Good? Tall? Fast? And a good shooter? I think we both know a person like that!*” She looks at Small Number’s sister Perfect Number, who is just finishing her math homework. “*I love you, mom!*” yells Small Number and he hugs his mom tightly. Perfect Number looks at them, very puzzled.



The following day Small Number says to his friends, “*Why not ask my sister, Perfect Number?*” “*But she is a girl!*” says Big Circle, feeling his heart beating a bit faster. “*Yes, she is a girl but she is also tall, fast, and a good shooter!*” respond the rest of the boys in one voice.



“With Perfect Number playing with us,” continues Small Number, “we can have twenty different teams on the court and nobody is ever going to get tired!”



Big Circle scratches his head and says: *“How can you calculate things like that? And, since I’m the best player, I have to play all the time!”*



“In that case, we can have ten different teams on the court... And she likes you too!” says Small Number as he runs away from a very angry Big Circle while their friends start laughing.

Question

How does Small Number know that if Perfect Number were to play with him and his friends, they would be able to have twenty different teams on the court during the tournament?