

Fiji Mathematics Team Competition– ZONES
Class 6 / YEAR 6- 2015

- C6/1 A recipe calls for 2 cups of liquid, which includes $\frac{1}{4}$ cup molasses. What fraction of the liquid in the recipe is molasses?

- C6/2 The flight is supposed to leave Auckland at 1:52 p.m., but you have been told that you need to be at the airport at least $2\frac{1}{2}$ hours early. What is the latest time that you may arrive? Give your answer as hours: minutes and indicate a.m. or p.m.

- C6/3 Martin has a business washing cars. Last year he washed 20 cars a week. This year, he wants to increase his business to 1,200 cars a year. How many more cars will he have to wash each month on average to achieve this target?

- C6/4 The city park is $9\frac{2}{5}$ Kilometers from Xena Elementary School. The city library is $3\frac{3}{10}$ kilometers from the same school. How much further from the school is the park than the library?

- C6/5 There are 90 kids that attend Year 6 in Harlem High School. If 40 are in Mrs. Sharma's class, and 20 are in Mr. Daveta's class, what percent make up the last classroom?

- C6/6 The grocery store parking lot will hold 1000 vehicles. $\frac{2}{5}$ of the parking spaces are for cars. When you went to buy groceries, there were 200 cars and some trucks in the parking lot. The parking lot was $\frac{3}{4}$ full. How many trucks were in it?

C6/7 The recipe for mint chocolate ice cream requires $2\frac{1}{4}$ cups of cream for 5 people. You need ice cream for 8 people. How much cream will you need?

C6/8 Fred sees $\frac{3}{4}$ of a pie on the kitchen counter. He is hungry, so he eats $\frac{1}{2}$ of the $\frac{3}{4}$ of the pie. What percent of the whole pie did Fred eat?

C6/9 A bread recipe calls for 4 eggs for every $\frac{3}{4}$ kilogram of flour you use. If you had 12 kilogram of flour, how many eggs would you need to make all the bread that you could?

C6/10 Jason wrote down a three digit number and dared the class to guess what it was. See if you can guess the number. He gave them a few clues:

A) The hundreds place digit is 8 greater than the ones place digit
B) The tens place digit is 4 greater than the ones place digit.
C) The sum of all three places values is 15.

What is the number that Jason wrote?

C6/11 If there are 5 zounds to a zong, 7 zongs to a zig, and 3 zigs to a zap, how many zounds are there to 3 zaps

C6/12 A rectangle field has an area of 525 square meters and a perimeter of 100 meters. What are the length and width of the field?

C6/13 Express the value of $\frac{4}{9} + \frac{3}{8}$ as a decimal

C6/14 How many tiles of size 100cm^2 are needed to cover a square shaped counter whose sides are 2m long?

C6/15 Eddie played movie in DVD at 10.57am. The total length of the movie is $2\frac{3}{5}$ hours. Due to a power failure, Eddie managed to watch only $1\frac{1}{4}$ hours. If the power failure lasted for 23 minutes, at what time would Eddie finish the movie?

C6/16 Raju and Rakesh are brothers. Raju left home and drove towards Nadi town at an average speed of 22km/hr. Rakesh left at the same time and drove in the opposite direction with an average speed of 43km/hr. How long does Rakesh drive before they are 65km apart?

C6/17 Jamey jogged for $\frac{1}{2}$ hour at 7 km/hr. She Jogged for another $\frac{1}{4}$ hours at 8km/hr. What distance did she jog altogether?

C6/18 A spinner is divided into 16 sections. 3 sections are red, 6 are blue, 5 are purple and 2 are orange. If you spin the spinner once, what is the probability that you will land on blue? Express the probability as a percentage.

C6/19 Robert's lunch, consisting of fruit, a roll and a can of fruit juice, cost him a total of \$ 2.60. He spent 30cents more on a can of fruit juice than for the fruit, and 50 cents more on the roll than the can of juice. How much did the roll cost him?

C6/20 Sheena has \$70. She is feeling very generous and wants to give away 0.4 of this amount to her brother and 0.5 of the remaining to her sister. How much of the money will she keep for herself?

Tie Breaker:

C6/21 A bag of marbles can be shared equally among 3, 5 or 6 students with none left over. What's the least amount of marbles that can be in the bag?

C6/22 In a classroom, 14 students like pineapple, 17 students like watermelon. 12 students like both pineapple and watermelon. What is the total number of students in this class?
