**Fiji Mathematics Team Competition – Zone**

**YEAR 8 – 2016**

Y8/1 The dosage for my eye condition is 2.5 ml per day. How many months (of 30 days) should a bottle of 300 ml last?

Y8/2 What is the next number in the Fibonacci sequence :

Y8/3 Add the following times together, expressing the answer in hours and minutes;

Y8/4 If a car travels at a constant speed of 6 meters per second, how many meters should it travel in 3 hours?

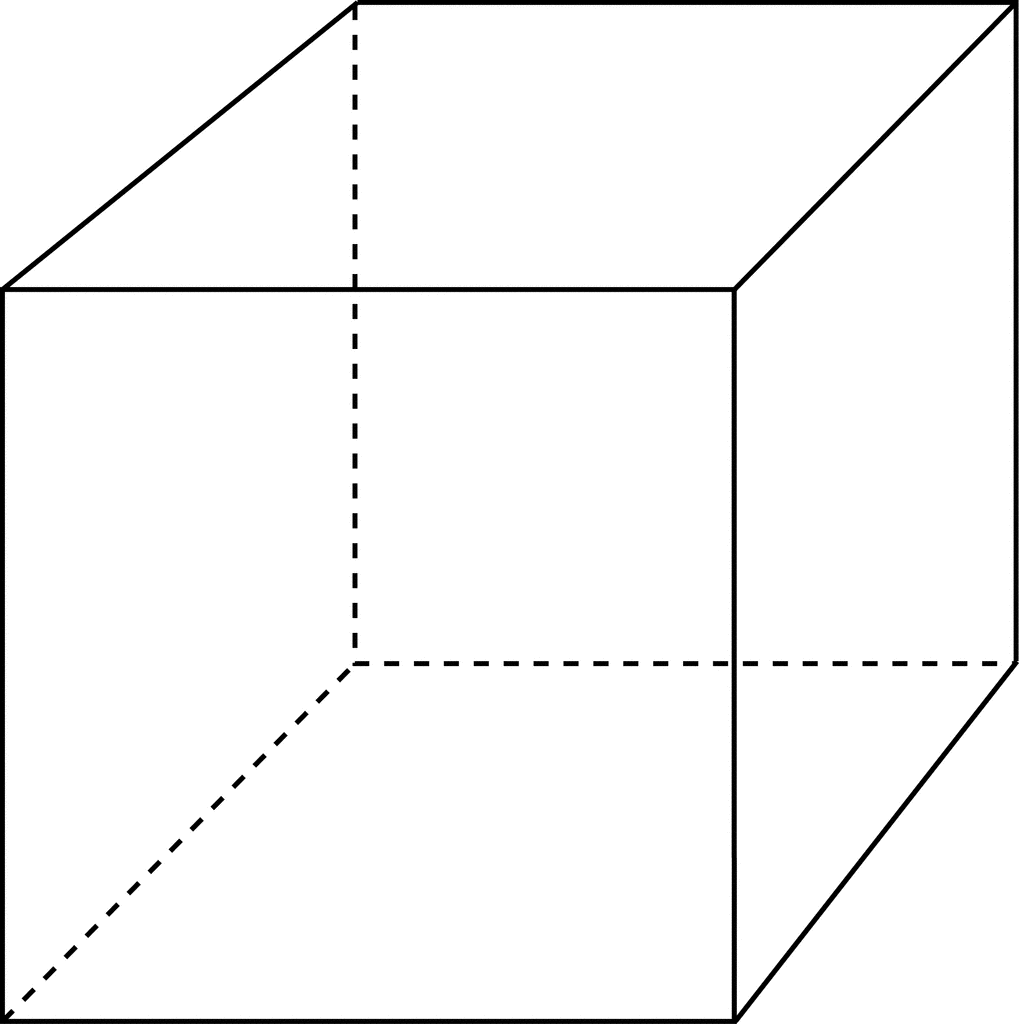
Y8/5 If Ram has four times as many CDs as I have, than what fraction of the total CDs do I have?

Y8/6 Find x such that 

Y8/7 In a certain Fijian village, there are 800 women. Four percent of the women wear one earring. Half of the remainder wears two earrings and the other half wear none.

How many earrings are worn by all of the women?

Y8/8 Determine the sum of the ten prime numbers after 17.



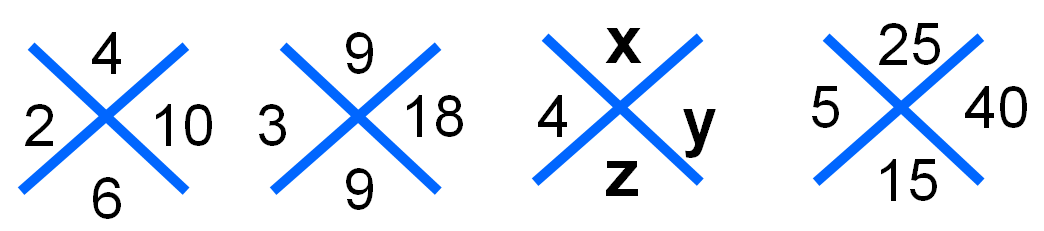
Y8/9 The volume of a cube is 512 cm3. Calculate the total length of all the edges of this cube?

Y8/10 In a local book shop you buy a calculator which costs $15.45 , a note book which costs $1.30 , a pen which costs $0.75 and a ruler which costs $0.65. How much change will you get if you give the cashier a $100 bill.

Y8/11 How many triangular numbers are there less than or equal to 100?

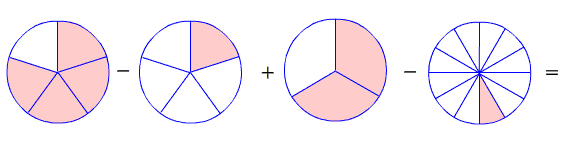
Y8/12 Determine the least common multiple of 12 and 14.

Y8/13 Study the X’s below and calculate the values for x, y and z.

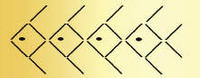


Y8/14 A parking garage charges a $3 entry fee and $1.25 for each hour of parking. If Mr. Singh was charged $16.75 for parking, find the number of hours his car was parked there?

Y8/15 Evaluate the following fraction addition/subtraction and give the answer as an improper fraction.



Y8/16 With 26 matchsticks, you can make 4 fish in this pattern. How many fish can you make with 140 matchsticks?

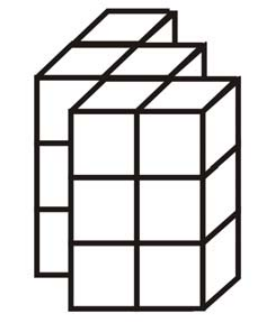


Y8/17 If a=12 , b=3 and c=18, evaluate;



Y8/18 There are 101 soccer teams who play in a knockout tournament, where the team on a bye (selected by raffle) automatically proceeds to the next round. How many games must be played to select a winner in the tournament?

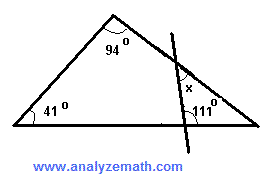
Y8/19 It takes 26 hours for the plane journey between London and Sydney. If the journey starts at 11:15am on Tuesday, London time, then what will be the local time and day at the destination, given that Sydney is 10 hours ahead of London?

Y8/20 The following solid was prepared using cubes of length (and width) equal to 3 centimeters. Determine the total volume of the solid shown in the figure.

…………………………………………………………………………………………………………………………

Tie breaker

Y8/21 Determine the angle marked x below.



Y8/22 A man bought 12 bags of rice at $50 per bag. Find his profit if he paid $15 for transport and sold the rice at $62 per bag.