

**Fiji Mathematics Team Competition–Class 6/Year 6 – 2014**

**Zones**

Y6/1 A rectangle field has an area of 300 square meters and a perimeter of 80 meters. What are the length and width of the field?

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Y6/2 The numbers  $x, y, z$  and  $w$  have an average equal to 25. The average of  $x, y$  and  $z$  is equal to 27. Find  $w$ .

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Y6/3 A car consumes 7.5 litres of petrol per 100 km. If the petrol tank of the car can hold 42 litres how many km the car can go?

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Y6/4 If  $x = 4$  and  $y = 3$  then, what is the value of  $xy - 2x$ ?

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Y6/5 Jolame earns \$36 for 3 hours of work. At that rate, how long would she have to work to earn \$720?

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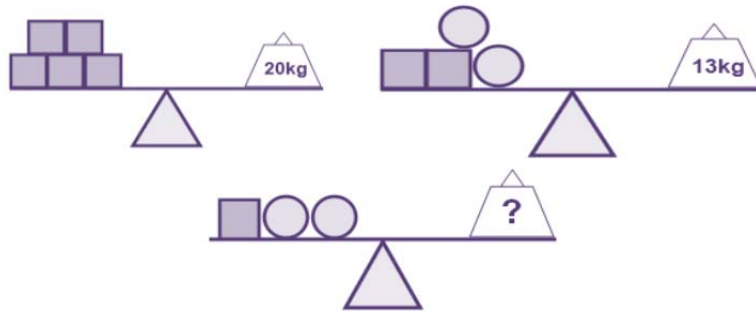
Y6/6 Express  $\frac{4}{9}$  as a decimal? (Write your answer to two decimal places)

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Y6/7 Aman, King and Terry are brothers. Aman is twice as old as King. Terry is three years younger than King. The sum of all their ages is 53. How old is King?

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Y6/8 The first two scales are balanced. What **size weight** is needed to balance the third one?



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Y6/9 Using the digits 2, 3, 4 and 5 in that order, and the symbols +, − and  $\times$  in any order, write a mathematical expression that equals 9. You may need to use brackets.

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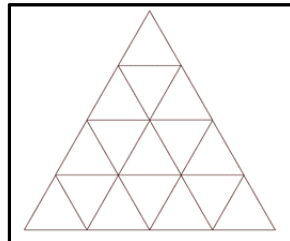
Y6/10 An ice-cream van offers four flavours of ice-cream: chocolate, vanilla, strawberry, and lemon. Donna is allowed to pick two different flavours for her ice-cream. How many possible flavour combinations could she choose?

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Y6/11 Imagine you have 25 beads. You have to make a three-digit number on an abacus. You must use all 25 beads for each number you make. What is the largest number that you can make using all the 25 beads?

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Y6/12 How many triangles can you count?



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Y6/13 In April Farmer Tutu bought a saddle for his horse \$100. In May he sold it for \$200. In June he was sorry he had sold it. So he bought it back for \$300. In July he got tired of it. So he sold it for \$400. Overall, did Farmer Tutu gain or lose money? How much did he gain or lose?

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Y6/14 My Mum was 27 when I was born. 8 years ago she was twice as old as I shall be in 5 years' time. How old am I now?

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Y6/15 Helen earns \$45 per hour and she works 37.50 hours per week. How much money does she earn per year?

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Y6/16 Lisa likes to go to one movie per week. She usually spends \$12 on her ticket and \$10 on a drink and popcorn. How much money would she save in 3 months if she went on Tuesdays when the price of a ticket was half off and she didn't have any snacks?

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Y6/17 Ginna has to saw a pipe into seven pieces. If it takes her four minutes to make one cut, how long will it take to cut into seven pieces?

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Y6/18 In the Year Six classroom the desks are organized in equal rows. Jane sits in the desk that is fourth from the front and third from the back. There are four desks on the right but only one to the left of Jane's desk. How many desks are in the room?

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Y6/19 Mrs. Harriman decided to enclose an area of her garden to use as a vegetable patch. She had to make sure that the rectangular area was fenced on all sides so that the goat would not wander in and munch on her vegetables. She used 26 posts to make the entire fence but used five more posts on the longer sides than the shorter sides. How many posts are on longer side?

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Y6/20 Eric's back garden is 10 metres by 14 metres in size. Each day Eric rides his tricycle down the three metre long path leading from the back door of his house to the garden and around the very edge of the garden four times. Then he rides back up the path where he leaves his tricycle. How far does he ride each day?

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Tie Breaker:

Y6/21 Kristina is two years older than Fredrik, who is 6 years younger than Simon. Together their ages total 41 years. How old is Simon?

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Y6/22 A rectangular field has a perimeter of 104 meters. The length of the field is 12 meters more than its width. Find the length of this field.

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