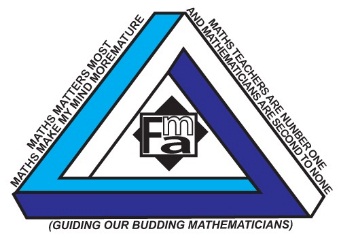
FIJI MATHEMATICS

ASSOCIATION

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**Fiji mathematics competition**

**(fmc)**

**YEAR 9**

**Thursday 23rd July 2015**

Time Allowed: 1 Hour 15 minutes

**Note:**

**Calculators are NOT permitted.**

**Diagrams are NOT drawn to scale.**

**Instructions:**

1. Print your **Name, School Name** and **Year** clearly in the space provided on the answer sheet.
2. Shade the circle corresponding to your answer with pencil on the answer sheet provided.
3. Multiple answers **will not be** accepted.



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1. 0.001 expressed as a fraction is

A. B. C. D. E.

2. Find the value of -2 + 3 x 2

A. -1 B. 1 C. 2 D. -2 E. 4

3. What is the value of x in the triangle given below?

A. 400 B. 200 C. 100

x

D. 500 E. 1000

x XX 1400

4. In a class of 40 students, of the students are boys. How many are girls?

A. 27 B. 10 C. 12 D. 15 E. 25

5. Work out 2200 x 1.2

A. 264 B. 26.4 C. 2640 D. 26400 E. 0.264

6. 10p - 15q – 5 (2p – 3q)

A. 20p – 30q B. -20p – 30q C. 20p D. -30q E. 0

7. Which of the following is the smallest fraction?

A. B. C. D. E.

8. The value of is

A. 16 B. 8 C. 10 D. 25 E. 32

9. The value of x in >1 is

A. -x > 1 B. x < 1 C. x < -1 D. x < -5 E. x < 5

10. What is the equation of the graph shown below?

y

y = 2

x

A. y > 2 B. 2 C. y D. 2 E. y = 2

11. $80 when increased by 25% is

A. $60 B. $100 C. $120 D. $125 E. $140

12. A car travels 0.6km in 1 minute. What is its average speed in m/s?

A. 0.6 B. 6 C. 6 D. 1 E. 10

13. Convert 3.5hrs into seconds

A. 10,800 B. 12,600 C. 15,000 D. 108 E. 126

14. There are 3 brothers in a family. The oldest is 2 years older than the middle one who is 3 years older than the youngest. If the sum of their ages is 53, what is the age of the youngest?

A. 13 B. 15 C. 16 D. 18 E. 20

15. The radius of a cylinder is 10cm and its height is 14cm. What is its volume in cm3 [use ]

A. 8800 B. 4400 C. 2200 D. E.

16. Which of the following is not true for a rhombus?

A. diagonals bisect the area B. opposite angles are equal

C. all the sides are not equal D. opposite sides are equal and parallel

E. it has four sides

17. Which of the following numbers is irrational?

A. -1 B. 1 C. D. E.

18. Simplify [dot represents multiplication]

A. 12n B. 10n C. D. E.

Consider a point A (-3, 4) on a Cartesian plane. Use this information for answer questions 19 and 20

19. A is reflected on the x-axis. What are the coordinates of the first image, )

A. (3, -4) B. (-3, -4) C. (-3, 4) D. (4, -3) E. (-4, -3)

20. If the reflected point is rotated by 900 clockwise about the origin, what are the coordinates of the second image, ?

A. (3, -4) B. (-4, 3) C. (-3, 4) D. (4, -3) E. (-4, -3)4

21. $200 will be shared by 3 friends on the ration 2 : 3 : 5. What is the least amount a friend will get?

A. $50 B. $40 C. $30 D. $20 E. $10

22. 5 mangoes cost Peter $6.00. For every 10 mangoes bought 2 are given free. If he wants 26 mangoes, how much he will have to spend?

A. $12 B. $18.60 C. $26.40 D. $14.40 E. $20.40

23. How many factors does the number 40 have?

A. 2 B. 4 C. 5 D. 6 E. 8

24. I chose a number and divide it by 5. Then I subtracted 154 from the result and got 6. What number was chosen?

A. 480 B. 560 C. 700 D. 800 E. 960

25. The length of a rectangle is four times its width. If the area is 100m2, what is the width of the rectangle?

A. 2.5m B. 3.0m C. 3.6m D. 4.0m E. 5.0m

26. How many axes of symmetry does an equilateral triangle have?

A. 0 B. 1 C. 2 D. 3 E. 4

27. The length of an object is increased by a factor of 3. If the area of the object was 5cm2, what is the area of the image [enlarged object] in cm2?

A. 75 B. 45 C. 25 D. 15 E. 8

28. Kahill bought a total of 20 cards, green ones which cost $0.25 and blue ones which cost $0.15 each. If he spent $4.20 to buy these cards, how many green cards did he buy?

A. 3 B. 5 C. 6 D. 8 E. 12

29. 6 men painted a house in 4 days. How many days will 5 men take to paint the same house.

A. 3.0 B. 4.5 C. 5.2 D. 4.8 E. 5.5

30. Evaluate -

A. 0 B. -3 C. 3 D. -6 E. 6