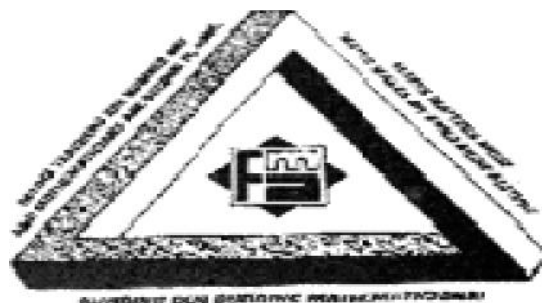


FIJI MATHEMATICS ASSOCIATION



FIJI MATHEMATICS COMPETITION

(FMC)

CLASS 8

Thursday 11th July 2013

Time Allowed: 1 Hour 15 minutes

Note:

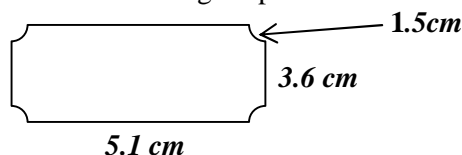
Calculators are NOT permitted.

Diagrams are NOT drawn to scale.

Instructions:

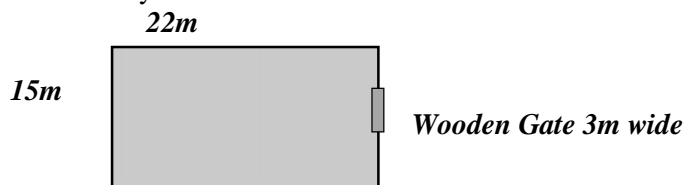
1. Print your **Name, School Name** and **Class** clearly in the space provided on the answer sheet.
2. Shade the circle corresponding to your answer with pencil on the answer sheet provided.
3. Multiple answers **will not be** accepted.

- The perimeter of an equilateral triangle is 36cm. What is the length of each side?
A. 9cm B. 12 cm C. 24cm D. 36cm E. 108cm
- Find the sum of 3, 4.06, 4.1 and 2.04
A. 4.41 B. 6.51 C. 13.20 D. 6.005 E. 13.11
- What fraction of 2cm is 10 mm?
A. $\frac{2}{10}$ B. 5 C. $\frac{1}{2}$ D. $\frac{20}{5}$ E. $\frac{10}{2}$
- What would be the diameter of a circle if the radius is 3.2cm?
A. 3.2cm² B. 3.2 cm³ C. 6.4 cm² D. 6.4cm³ E. 6.4cm
- What is the total perimeter of the following shape that Kavita drew in her book?

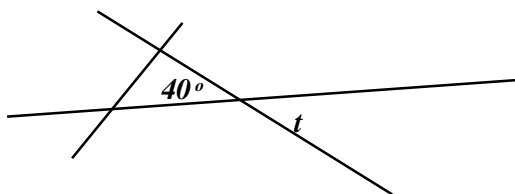


- A. 17.4 cm³ B. 17.4cm² C. 23.4 cm D. 23.4cm² E. 23.4 cm³
- Which of the following shows the correct decimal value of $\frac{76}{1000}$?
A. 76.00 B. 0.076 C. 0.76 D. 0.0076 E. 000.76
- What is the special name given to all four sided figures?
A. Square B. arrowhead C. trapezium D. Rhombus E. Quadrilateral
- Rahul made a profit of 25% when he sold his fishing boat at \$5000. Calculate the original price of the boat.
A. \$4975 B. \$3750 C. \$6250 D. \$5025 E. \$1250
- What would be the arrival time of Pacific Express at Suva bus stand if it starts its 3 hours 35 minutes journey at 6.45 from Nadi?
A. 09:45 B. 10:20 C. 21:45 D. 22:20 E. 10:00
- How much will be Mala's wages if 10% FNPF is deducted from her gross pay of \$640?
A. \$64 B. \$576 C. \$768 D. \$630 E. \$704
- Roqa does fortnightly payment of \$172.50 to the bank. How much will he end up paying in a year?
A. \$4485.00 B. \$862.50 C. \$44850.00 D. \$22425.00 E. \$4657.50

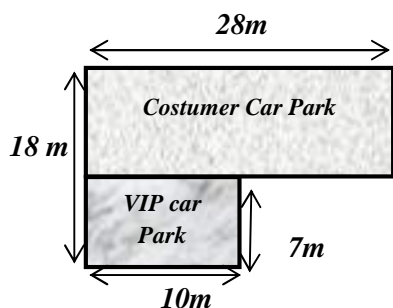
12. Josh decided to fence his rectangular compound with 5 strands of barbed wire. He plans to have a wooden gate 3m wide. What length of wire will Josh buy?



- A. 71 meters B. 74 meters C. 327 meters D. 330 meters E. 355 meters
13. Akash travelled from Nadi to Sigatoka in his motorbike covering 73.45km. He continued his journey to Suva covering another 216.7km. He then returned to Nadi. What was the total distance of travelling?
- A. 580.3 km B. 290.15km C. 363.60km D. 506.85km E. 143.25km
14. Mr. Wise drew this on the board during mathematics class. What is the value of angle t in the following diagram?
- A. 55° B. 45° C. 40° D. 140° E. 35°



15. What is the total area of the VIP & Customer Car Park in front of Grand Pacific Resort in Toga?



- A. 308m^2 B. 378m^2 C. 70m^2
D. 238m^2 E. 504m^2
16. A pizza parlor has 12 tables set outside and 29 inside. Which of the following number sentence solves the number of legs these tables have altogether?
- A. $12 \times 4 + 29$ B. $29 \times 4 + 12$ C. $(12 + 29) \times 4$ D. $29 + 12 \times 4$ E. $12 + 29 \times 4$
17. If 4 liters of paint covers the area of 250m^2 , how much paint is needed for an area of 2500m^2 ?
- A. 10 liters B. 40 liters C. 400 liters D. 250 liters E. 2500 liters
18. A total of 150 coins are there in two boxes. Seventeen coins are then shifted from the first box to the second, resulting in the second box having twice the number of coins as the first. The number of coins in the first box before the shift was
- A. 83 B. 33 C. 67 D. 100 E. 50
19. The digits 7, 4, and 8 are written on three cards as shown.

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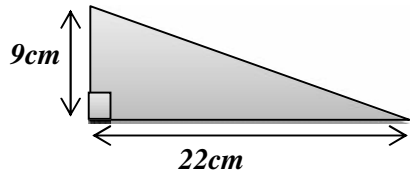
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 Six different 3-digit numbers can be made using these three cards. If these numbers are arranged from the smallest to the largest, in which position is 784?
- A. Second B. third C. fourth D. fifth E. sixth
20. What is the least common multiple of 6 and 8?
- A. 24 B. 12 C. 48 D. 36 E. 40

21. What is the value of i if the rule of the number machine is $3i + 5$ and the output is 41.
 A. 15.33 B. 138 C. 8.67 D. 12 E. 118

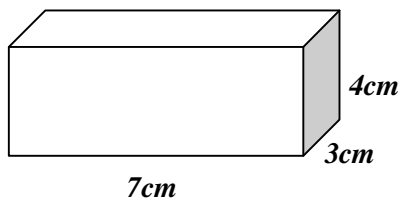
22. What is the sum of interior angles of a pentagon?
 A. 90° B. 180° C. 270° D. 360° E. 540°

23. Calculate the area of the following triangle drawn by Shruti in mathematics class.



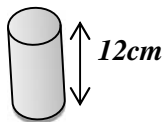
- A. 31cm^2 B. 99cm^2 C. 198cm^2
 D. 13cm^2 E. 66cm^2

24. What is the total surface area of the rectangular prism given below?



- A. 112 cm^2 B. 84cm^2 C. 14cm^2
 D. 61cm^2 E. 122cm^2

25. What would the volume of the following prism be with a base area of 35cm^2 ?



- A. 420cm^3 B. 420cm^2 C. 47cm^2 D. 402cm^2 E. 42cm^2

26. A tin of pink paint was made up of half a liter of white paint and 750 milliliters of red paint. How many litres of paint were there in altogether in the tin?

- A. 1.25 l B. 2.5 l C. 0.5 l D. 0.25 l E. 0.75 l

27. Tevita spent 75% of \$130 on cloths and 10% on taxi fare. The remaining money he used to buy his lunch. How much did he spend on his lunch?

- A. \$19.50 B. \$97.50 C. \$13.00 D. \$32.50 E. \$110.50

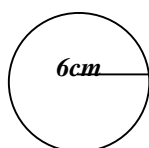
28. Bale is thrice as old as Nina. Nina is twice as old as Gita. If Gita is 6 years old, how old is Bale?

- A. 6 B. 12 C. 36 D. 18 E. 24

29. What will be the circumference of a circle which has a radius of 7 cm? (Use $\pi = 3.14$)

- A. 43.96cm B. 21.98cm C. 52.14cm D. 10.14cm E. 17.14cm

30. Tania drew the following figure on the board. Calculate the area using $\pi = 3.14$.



- A. 113.04cm B. 113.04cm^2 C. 113.04cm^3
 D. 37.68cm^2 E. 37.68cm^3