

FIJI MATHEMATICS ASSOCIATION



FIJI MATHEMATICS COMPETITION (FMC) YEAR 7

Wednesday 6th September 2017

Time Allowed: 1 Hour 15 minutes

Note:

Calculators are NOT permitted.

Diagrams are NOT drawn to scale.

Instructions:

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

Year 7

1. When 364ml is rounded to the nearest tens is
A. 365 ml B. 360 ml C. 370 ml D. 350 ml E. 300 ml
 2. Which of the following is a prime number?
A. 1 B. 4 C. 6 D. 2 E. 8
 3. What is $\frac{1}{10}$ of fifty dollars?
A. \$7.50 B. \$5.00 C. \$1.00 D. \$10.00 E. \$15.00.
 4. How many seconds are there in a day?
A. 60 B. 3600 C. 1440 D. 86400 E. 86000
 5. My Grandfather weighs 90 kg, and my mum weighs 46.05 kg. What is the difference in their weights?
A. 136.05 kg B. 90 kg C. 46.05 kg
D. 43.95 kg E. 44.95 kg
- A black silhouette of a person sitting on a folding chair, facing right. The person is wearing a cap and has their legs crossed at the ankles.
6. If $\frac{n}{2} = 7$ What is the value of n.
A. 3 B. 14 C. 4 D. 8 E. 6
 7. Write down the total value of the following
 $800000 + 76000 + 5400 + 100 + 39$
A. 87654130 B. 8765439 C. 87654139 D. 881539 E. 8815439
 8. The number 8 is $\frac{1}{7}$ of
A. 42 B. 15 C. 56 D. 16 E. 2
 9. Arrange the numbers 36, 12, 29, 21, 7 in descending order.
A. 36, 29, 21, 12, 7 B. 7, 12, 21, 29, 36 C. 36, 29, 7, 21, 12
D. 7, 36, 12, 29, 21 E. 7, 12, 21, 36, 29
 10. $0.12 \times 1000 = \square$
A. 0.12 B. 0.120 C. 0.012 D. 12 E. 120

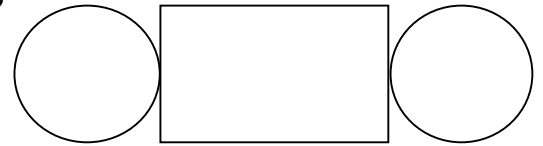
Year 7

11. Find the perimeter of a rectangular field with length 86 m and width 24 m.
 A. 344 m B. 110 m C. 220 m D. 2064 m E. 220 km

12. Which of the following is a square number?
 A. 19 B. 25 C. 21 D. 30 E. 50

13. The diagram on the right shows the net of a _____?

- A. Circle B. Cone C. Cube
 D. Cylinder E. Sphere



14. A Water Truck fills a tank with 515 litres of water every 3 days. How many litres of water will it fill in 30 days?
 A. 5150 litres B. 3490 litres C. 51.5 litres D. 521 litres E. 5640 litres

15. $\frac{3}{4} \div \frac{5}{2} = \square$

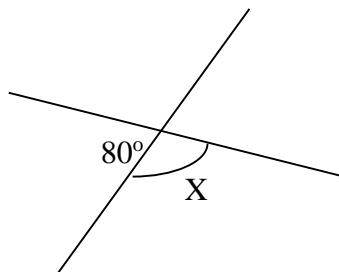
- A. $\frac{15}{8}$ B. 1 C. $\frac{3}{10}$ D. $\frac{3}{4}$ E. $\frac{6}{9}$

16. $198 - \square = 99$

Find the missing numeral

- A. 98 B. 99 C. 100 D. 198 E. 199

17.



Find the angle size of angle marked X

- A. 100° B. 80° C. 180° D. 360° E. 280°

18. Change 0.25 into fraction

- A. $\frac{3}{4}$ B. $\frac{1}{2}$ C. $\frac{2}{5}$ D. $\frac{1}{4}$ E. $\frac{25}{50}$

19. $4^2 - a = 11$ Find the value of a.

- A. 16 B. 1 C. 12 D. 4 E. 5

20. What is the highest common factor of 15 and 20?

- A. 5 B. 4 C. 6 D. 3 E. 10

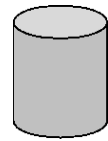
21. $675 \div 9 = \square$

- A. 63 B. 70 C. 75 D. 72 E. 750

22. The formula for calculating the volume of a **cylinder** is

- A. $\frac{1}{2}(a + b) \times h$ B. $\frac{1}{2} \times b \times h$ C. πr^2 D. $\pi r^2 \times h$ E. $l \times w$

23. Find the volume of the cylinder shown if the radius is 1 cm and the height is 7 cm. (Use $\pi = \frac{22}{7}$)



- A. 154 cm^3 B. 22 cm^3 C. 14 cm^3 D. 49 cm^3 E. 7 cm^3

24. Calculate $25 + 5 \div 5 - (3 \times 2)$

- A. 0 B. 6 C. 25 D. 20 E. 26

25. Set P = {1, 3, 6, 11} and Set Q = {2, 3, 4, 6}

From the two sets find $P \cap Q$

- A. {1, 4} B. {3, 6} C. {1, 11} D. {1, 2, 3, 4, 6} E. {2, 3, 6}

26. Calculate 10 % of 13500

- A. 1350 B. 13500 C. 135 D. 13.5 E. 3500

27. What time would be one and half hours from 4.30 pm?

- A. 5.00 pm B. 4.00 pm C. 2.00 pm D. 3.00 pm E. 3.30 p m

28. What is the next number in the sequence 3, 7, 11,

- A. 15 B. 12 C. 14 D. 16 E. 13

29. The value of y in the equation $2y + 4 = 18$ is

- A. 18 B. 6 C. 7 D. 5 E. 14

30. $6 \div 2(1 + 2) = \square$

- A. 1 B. 2 C. 3 D. 4 E. 9