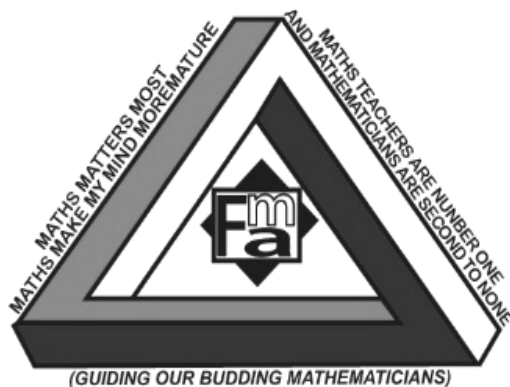


# FIJI MATHEMATICS ASSOCIATION



## FIJI MATHEMATICS COMPETITION (FMC) YEAR 6

**Thursday 6<sup>th</sup> September 2018**

**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 6

1. 27653 expressed as words is :
- A. Twenty seven thousand six fifty three      B. Twenty seven thousand six fifty three hundred  
C. Twenty seven thousand six hundred fifty three      D. Two hundred seventy six thousand fifty three  
E. Two hundred seventy thousand six hundred fifty three

2. The prime factorisation of 36 is

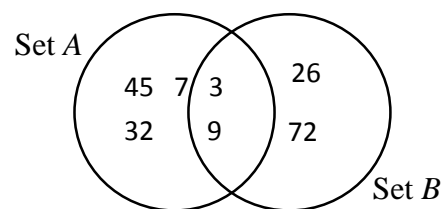
A.  $2 \times 2 \times 3 \times 3$       B.  $2 \times 2 \times 9$       C.  $4 \times 3 \times 3$       D.  $4 \times 9$       E.  $1 \times 36$

3. 596956 when rounded to the nearest hundred is?

A. 60000      B. 597000      C. 596000      D. 597050      E. 596900

4. The Venn diagram shows relationship between Set A and Set B. What are the cardinal number of  $A \cup B$ ?

A. 2      B. 3      C. 4  
D. 5      E. 7



5. Evaluate:  $2(45+3) + (40-6)$

A. 130      B. 164      C. 127      D. 133      E. 311

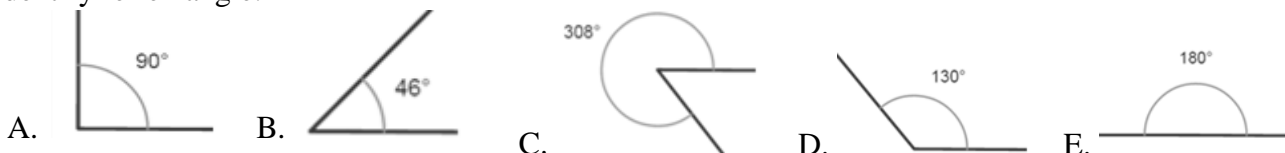
6. Mr Ali had \$6361.35 in his savings account. He divided it equally amongst his 3 children. How much did each child get?

A. \$3130.40      B. \$2120.45      C. \$2120.15      D. \$19084.05      E. \$4427.00

7. Rajesh bought 2 large pizza for a party. During the party  $\frac{7}{10}$  of the first pizza and  $\frac{9}{12}$  of the second pizza was eaten. What fraction of the 2 pizzas were left?

A.  $\frac{9}{20}$       B.  $\frac{6}{22}$       C.  $\frac{11}{20}$       D.  $\frac{3}{10}$       E.  $\frac{5}{12}$

8. Identify reflex angle.



9. Which set shows the numbers arranged in descending order?

A. {0.4, 0.55, 0.83, 1.3, 4}      B. {2.3, 1.25, 1.3, 0.9, 0.3}      C. {0.4, 0.6, 0.83, 2, 4}  
D. {2.3, 1.55, 1.3, 0.9, 1}      E. {2.3, 1.7, 1.3, 0.9, 0.3}

10. Samu sells eggs after school to help out his parents. The sales for last week is stated in the table below. How many eggs did Samu sell last week?

Day	Monday	Tuesday	Wednesday	Thursday	Friday
Number of eggs	$2\frac{1}{2}$ dozen	20 eggs	$3\frac{1}{4}$ dozen	$5\frac{1}{3}$ dozen	32 eggs

A. 185      B. 63      C. 184      D. 180      E. 757

11. A number pattern follows the rule  $4n + 3$ . Where  $n$  is the number in the sequence. What will be the 107<sup>th</sup> number in the sequence?

A. 107      B. 341      C. 128      D. 431      E. 428

## Year 6

12. Convert 5892meters into kilometres

- A. 58.92km      B. 589.2km      C. 58920km      D. 0.5892km      E. 5.892km

13. A rectangle has a perimeter of 30m and area of  $50\text{m}^2$ . What is the length and width of the rectangle?

- A. L = 11, W = 4      B. L = 12, W = 3      C. L = 10, W = 5  
D. L = 9, W = 6      E. L = 5, W = 10

14. Express 356gram as percentage of 2kg

- A. 35.6%      B. 71.2%      C. 5.8%      D. 3.56%      E. 17.8%

15. Shafil bought the groceries as stated in the table. What is the total mass of his shopping?

Item	Mass
Flour	10kg
Potatoes	2.8kg
Onion	3 and half kg
Milk	900grams

- A. 17.2g  
B. 17.02kg  
C. 1720g  
D. 17.2kg  
E. 17020g

16. A family left Lautoka at 10:35 am and reached Suva at 2:20 pm the same day. How long was the road trip?

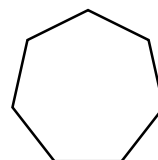
- A.  $3\frac{3}{4}$  hours      B. 3 hours 20 minutes      C.  $3\frac{1}{4}$  hours  
D. 215 minutes      E. 3 hours 50 minutes

17. Fiji Airways flight FJ410 left Nadi International Airport at 11:15am and travelled a distance of 2151km to reach Auckland Airport at 2:15pm the same day. What was the average speed of the aircraft?

- A. 537.75 km/h      B. 717 km/h      C. 715 km/h      D. 537 km/h      E. 435 km/h

18. Identify the polygon shown on the right.

- A. Quadrilateral      B. Pentagon      C. Octagon  
D. Hexagon      E. Heptagon

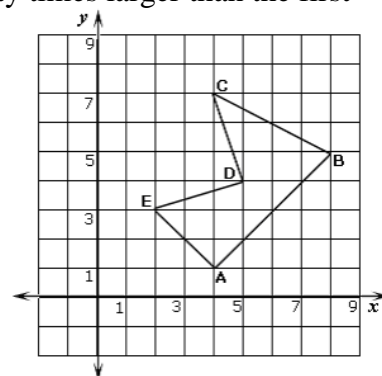


19. James thought of 3 numbers? The second number that he thought of was 300. The first number was 5 times smaller than the second number and the third number was twenty times larger than the first number. What is the sum of all 3 numbers?

- A. 50      B. 1560      C. 300  
D. 2250      E. 2520

20. What is the coordinates of point B on the Cartesian plane?

- A. (4,8)      B. (2,5)      C. (5,8)  
D. (8,5)      E. (7,5)



21. A box contains 3 blue marbles, 4 red marbles, 7 green marbles and 6 white marbles. Sakusa takes out one marble with his eyes closed. What is the probability that the marble he picks will not be white?

- A.  $\frac{7}{10}$       B.  $\frac{3}{10}$       C.  $\frac{6}{20}$       D.  $\frac{1}{2}$       E.  $\frac{4}{5}$

## Year 6

22. Which number is midway between 1.5 and 5.4?

- A. 2.95                      B. 1.95                      C. 3.45                      D. 4.5                      E. 3.5

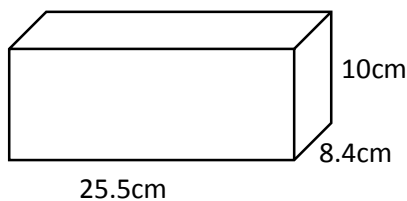
23. The fare for hiring a taxi is 10cents for every 100meters travelled plus \$2. A taxi in Lauoka was hired 5 times last morning. The distance travelled by each passenger is indicted in the table below.

Passenger	First	Second	Third	Fourth	Fifth
Distance	5.3km	2900m	1300m	4.2km	11.8km

What was the total fare that the taxi driver collected for the 5 trips?

- A. \$255.00                      B. \$35.50                      C. \$25.50                      D. \$355.00                      E. \$8.40

24. A not to scale diagram of a small container is given. How much water can be filled in the container?



- A. 2142l                      B. 2.142ml                      C. 2.142l  
D. 214200ml                      E. 20.42l

25. A 24 hour café uses an average of 637liters of milk per week. How much milk was used in the month of August?

- A. 2548l                      B. 2611.7l                      C. 2675.4l                      D. 91l                      E. 2821l

26. A farmer has 3450m<sup>2</sup> of land. He planted cabbage in  $\frac{1}{3}$  and carrot  $\frac{1}{4}$  in of the land. In the remainder of the land he planted corn. How much area was used to plant corn?

- A. 1150m<sup>2</sup>                      B. 1437.5m<sup>2</sup>                      C. 2012.5m<sup>2</sup>                      D. 862.5m<sup>2</sup>                      E. 2464.29m<sup>2</sup>

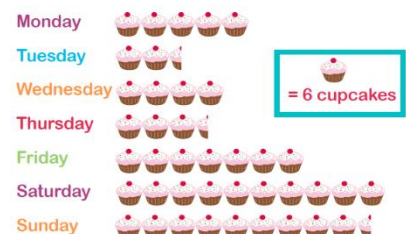
27. What is the name give to a line that joins two points on the circumfrence of the circle and does not pass through the centre of the circle?

- A. Radius                      B. Diameter                      C. Cord                      D. Arc                      E. Tangent

28. Mike is paid at a rate of \$5.45/hour for the first 45 hours for the week and \$7.20/hour for any extra hours worked. Calculate his wages for working 52 hours.

- A. \$295.00                      B. \$295.65                      C. \$283.40                      D. \$301.20                      E. \$281.35

29. The number of cup cakes sold last week by the local bakery is illustrated by the pictogram on the right. What is the range of the cupcakes sold?



- A. 45                      B. 60                      C. 15  
D. 10                      E. 7.5

30. Rakesh went to Jacks and bought a bula shirt for \$28.40, 2 pairs of jeans at \$35.99 each, 1 cap for \$7.72 and 3 pairs of socks at \$2.34 a pair. What was the total he had to pay?

- A. \$115.15                      B. \$74.45                      C. \$110.45                      D. \$115.10                      E. \$115.12