SST PUBLIC SCHOOL RASHIDABAD

Name:_____ TEMP ID

ENTRY TEST 2021

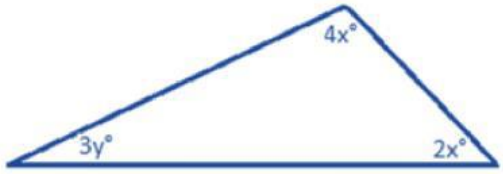
Subject: Mathematics **Maximum Marks: 40** **Time: 40 Min**

Class: Pre-Cambridge

NOTE:

- **Each Question carry equal marks.**
- **Calculator is not allowed.**

1. Which of the following expresses a true relationship between x and y in the figure below? [2]



(A) $y = 180 - 3x$ (B) $y = 60 - 2x$

(C) $x + y = 90$ (D) $y = 2x$.

2. On this board, a player can only score 2, 6 or 9 points for a throw. [2]

What is the smallest number of throws needed to get a total score of exactly 82?

(A) 11 (B) 10

(C) 9 (D) 12

3. The prime numbers between 60 and 69 are: [2]

(A) 63 and 69 (B) 61 and 67

(C) 60 and 65 (D) None of these

4. The Smallest, odd number of three digits is _____ [2]

(A) 99 (B) 999

(C) 101 (D) None of these

5. The seed of this mango is 20 % of its total mass, the mass of the mango is 300g. [2]

What is the mass of the seed?

(A) 15g (B) 30g

(C) 60g (D) 280g

6. Kiran collected some spiders and some ants in her garden [2]

Each spider had 8 legs and each ant had 6 legs. She collected 8 animals altogether and they had a total of 58 legs.

How many ants did Kiran collect?

(A) 2 (B) 5

(C) 3 (D) 8

7. All these numbers can be divided by same **"Magic"** number without leaving a remainder. [2]

182 273 286 429

What is the magic number?

(A) 3 (B) 7

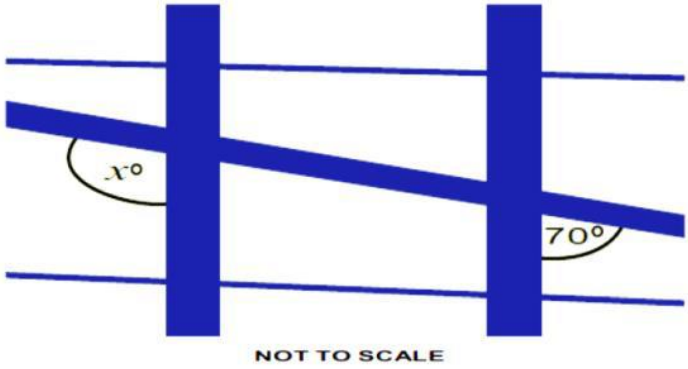
(C) 11 (D) 13

8. Fatima bought a model of Minar-e-Pakistan that is one-third taller than her height. Fatima is 156 cm tall, what is the height of a model of Minar-e-Pakistan? [2]

(A) 208 cm (B) 189 cm

(C) 104 cm (D) 52 cm

9. The map shows the angles between some roads in a town. Two of the large roads are head due north. [2]



Find the value of x.

(A) 70 (B) 20

(C) 110 (D) 160

10. Find area of shaded part if the area of larger rectangle is $1750\ m^2$ and the area of smaller rectangle $1350\ m^2$. [2]

(A) $3100\ m^2$ (B) $750\ m^2$

(C) $400\ m^2$ (D) $350\ m^2$

11. Perfect square roots between 250 and 300 are: [2]

(A) $(252, 289)$ (B) $(262, 279)$

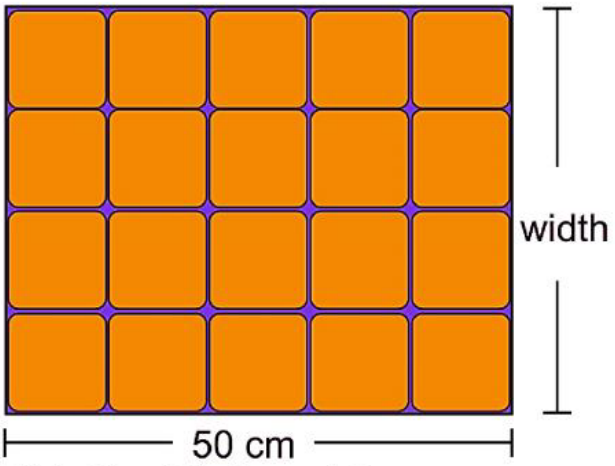
(C) $(256, 289)$ (D) None of these

12. If two angles are said to be supplementary angles and one of the angles is 122° then other angle should be. [2]

(A) 35° (B) 58°

(C) 60° (D) 32°

13. [2]

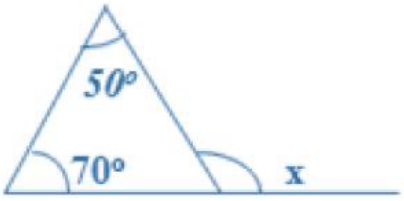


Which of the width of rectangle?

(A) 4 cm (B) 5 cm

(C) 40 cm (D) 50 cm

14. What is the value of x? [2]



(A) 50° (B) 70°

(C) 120° (D) 180°

15. The area of square whose perimeter is 4m. [2]

(A) $1m^2$ (B) $2m^2$

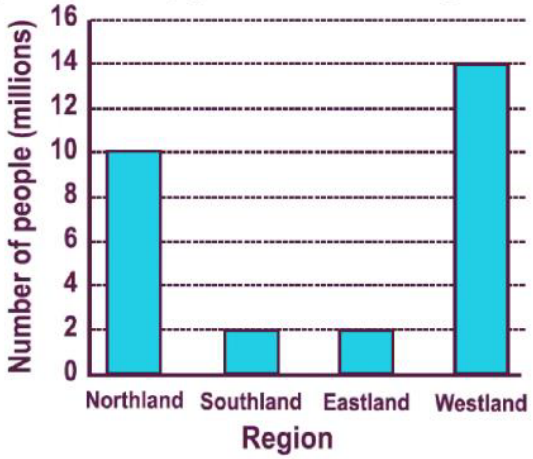
(C) $4m^2$ (D) $3m^2$

16. If $4x + 13 = 7 - 2x$, what is the value of x? [2]

(A) -1 (B) 1

(C) $\frac{-10}{3}$ (D) -3

17. Naila drew this graph to show the population of the four regions in her country. [2]



She wants to put same information in sector (pie) graph.
What angle should Naila use to represent the population of westland?

(A) 64° (B) 90°

(C) 150° (D) 180°

18. $\left(\frac{-b \pm \sqrt{b^2 - 4ac}}{2a}\right)^0 \times \sqrt{49} = ?$ [2]

(A) $\frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$ (B) 49

(C) 0 (D) 7

19. Mode of the data 13, 16, 12, 14, 19, 12, 14, 13, 14 is: [2]

(A) 14 (B) 12

(C) 19 (D) 13

20. If $A = \{0, -1, 2\}$ and $B = \{e, f, g\}$ then $A \cap B =$ _____ [2]

(A) $\{\emptyset\}$ (B) $\{0, -1, 2, e, f, g\}$

(C) $\{\}$ (D) None of these.