

Pabna Cadet College
4th Tutorial Examination Solution
Subject: Mathematics
Class: VII

Time: 40 minutes

Full Marks: 20

Answer all the questions

1. If the area of a square is 29.16 sq. meters, what is length of its each side?

- i. 5.40 ii. 4.50 iii. 5.42 iv. 5.44

Answer: i. 5.40

2. Consider $a = 2$ and $b = 7$. Consider an expression $ab - 1$. What is the smallest numbers that is to be added to or subtracted from this expression to make it a perfect square number?

- i. 3 ii. 2 iii. 4 iv. 5

Answer: i. 3

3. The square root of which fraction is a perfect square?

- i. $\frac{9}{16}$ ii. $\frac{16}{25}$ iii. $\frac{25}{36}$ iv. $\frac{16}{81}$

Answer: iv. $\frac{16}{81}$

4. What is the square root of 0.067 up to three digits?

- i. 0.257 ii. 0.259 iii. 1.259 iv. 0.359

Answer: ii. 0.259

5. A canoe can travel 6 km per 30 minutes in still water. What is the speed of the vehicle in kph?

- i. 15 kph ii. 16 kph iii. 12 kph iv. 9 kph

Answer: iii. 12 kph

6. A cistern has two pipes. The first and second pipes can fill the empty cistern in 10 and 12 hours, respectively. In 1 hour, how many parts of the cistern is to be filled by two pipes?

- i. $\frac{11}{60}$ ii. $\frac{11}{66}$ iii. $\frac{11}{12}$ iv. $\frac{10}{12}$

Answer: i. $\frac{11}{60}$

7. 15 Persons can complete a work in 20 days; how many persons can do it in 1 day?

- i. 240 ii. 300 iii. 425 iv. 320

Answer: ii. 300

8. A vehicle consumes 10 liters of diesel to go 80 km. How much diesel (in ml) does it require to go 1 kilometer?

- i. 8 ii. 80 iii. 25 iv. 125

Answer: iv. 125

9. A merchant sells 30,500 gm lentil per day. How many kgs of lentil does he sell in 30 days?

- i. 915 ii. 550 iii. 815 iv. 519

Answer: i. 915

10. $x^2 + 9 = 0$; What is value of x?

- i. 3 ii. -3 iii. ± 3 iv. No Real values

Answer: iv. No Real values

11. What is the root of the equation $\frac{z}{3} - \frac{z-1}{4} = 1$

- i. 8 ii. 9 iii. 7 iv. 5

Answer: ii. 9

12. What is the number, if 27 is subtracted from it, the difference will be -21?

- i. 6 ii. 8 iii. -6 iv. 21

Answer: i. 6

13. The sum of three successive numbers is 201; what is the largest number?

- i. 70 ii. 67 iii. 68 iv. 66

Answer: iii. 68

14. Sakib collects some stamps; he gives half of them to his friends and one third to his brother. He still has 10 stamps with himself. How many stamps did he collect?

- i. 30 ii. 20 iii. 50 iv. 60

Answer: iv. 60

15. In which quadrant is $(-1, 3)$ situated?

- i. Second ii. First iii. Third iv. Fourth

Answer: i. Second

16. In which of the following point of x-axis, the equation $4x - 7 = 0$ will intersect?

- i. $(\frac{4}{7}, 0)$ ii. $(\frac{7}{4}, 0)$ iii. $(0, \frac{4}{7})$ iv. $(0, \frac{7}{4}, 0)$

Answer: ii. $(\frac{7}{4}, 0)$

17. Consider these points: A (0,2); B(5,5); C(5,3); and D(5,0). Put them on graph paper, and draw lines from A to B, from B to C, from C to D, and from D to A. What is the shape that has been generated?

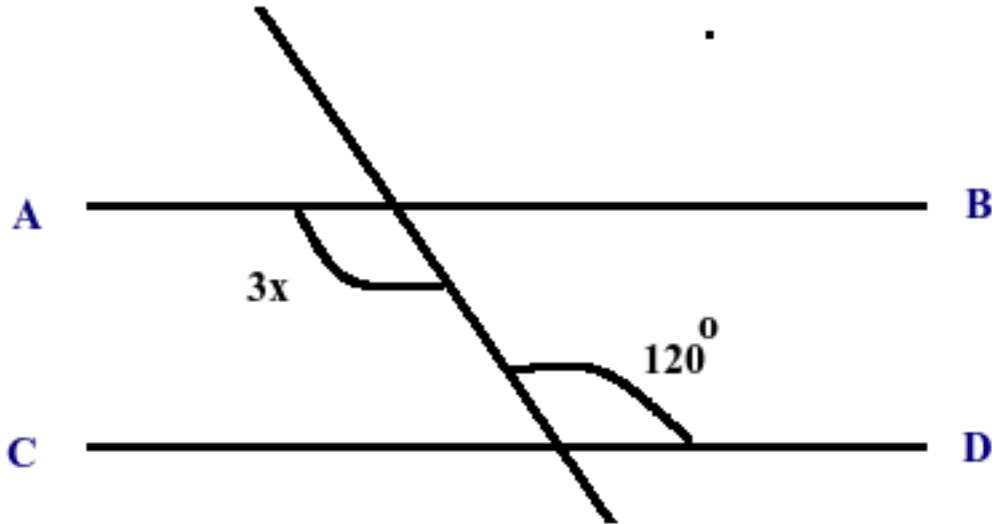
- i. Triangle ii. Parallelogram iii. Square iv. Rhombus

Answer: i. Triangle

18. If a line intersects two other lines, how many pairs of corresponding angle are made?

- i. 2 ii. 4 iii. 3 iv. 6

Answer: ii. 4



19.

In the figure, $AB \parallel CD$. What is the value of x ?

- i. 45 ii. 50 iii. 40 iv. 20

Answer: iii. 40

20. If the side of a triangle is 6 cm and adjoining angles are 60 degrees and 30 degrees, how will the triangle be?

- i. Right-angled ii. Isosceles iii. Equilateral iv. Acute-angled

Answer: i. Right-angled

—Good Luck—