ZERO PERIOD
We Believe in Learning

Section – A
(Each question carries 1 mark)

1. A grocer had a profit of ` 47 on Monday but suffered a loss of `12 on Tuesday. Find his net profit or loss in 2 days.

2. Find $\frac{2}{3}$ of 27.

3. Find the range of the following data: 2, 5, 9, 3, 5, 4, 7

4. If the complement of an angle is $79°$ then what is the measure of that angle?

5. How many rational numbers are there between two rational numbers?

6. If area of a triangle is 100 cm^2 and its altitude is 10 cm, then find its base.

Section – B
(Each question carries 2 marks)

7. Subtract (-8) from 11. Also subtract 11 from (-8). Are they equal?

8. The length of a rectangle is 7.1 cm and its breadth is 2.5 cm. Find its perimeter.

9. Calculate mean of the first 10 even numbers.

10. What will be the length of a tape required to cover the edges of a semi-circular disc of radius 10 cm. (Use $\pi = 3.14$)

11. Simplify: $\left(\frac{6}{5} \times \frac{3}{7} \right) - \left(\frac{1}{5} \times \frac{3}{7} \right)$

12. The sum of two vertically opposite angles is $166°$. Find each of the angles.

Section – C
(Each question carries 3 marks)

13. In a class test containing 15 questions, 4 marks are given for every correct answer and -2 marks are given for every incorrect answer. Ranjeeta attempted all questions but only 9 of her answers were correct. How many answers were incorrect? What is her total score?

14. Verify: $(-30) \times [13 + (-3)] = [(-30) \times 13] + [(-30) \times (-3)]$.

15. Simplify: $\dfrac{\frac{3}{7} \div \frac{1}{5}}{2\frac{1}{2} \div \frac{1}{2}}$

16. A floor is 4.5 m long and 3.6 m wide. How many square tiles of side 0.06 m are required to cover the floor?

OR

A car covers a distance of 360.25 km in 5.5 hours. Find the speed of the car. How much distance will it covers in 8 hours?

17. Find the mode and median of the following set of data:
6, 2, 5, 4, 3, 4, 4, 2, 3

18. In the figure given alongside, line *l* is parallel to line *m*. Find the values of *x*, *y* and *z*.
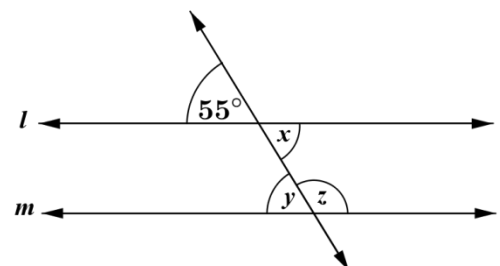
19. Find the reciprocal of $\left(\dfrac{1}{2}\times\dfrac{1}{4}\right)+\left(\dfrac{1}{2}\times 6\right)$

20. How much distance a wheel of radius 25 cm will cover if it rotates 350 times. (Use $\pi=\dfrac{22}{7}$)
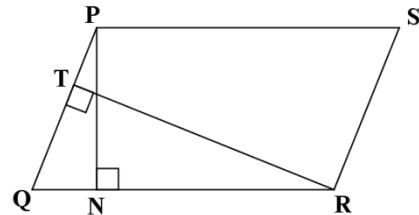
<p align="center">OR</p>

A path 1 m wide is built along the border and inside a square garden of side 20 m. Find the area of the path.

21. In the figure given alongside, PQRS is a parallelogram. PN and RT are perpendicular drawn on the sides QR and PQ respectively. If QR = 14 cm, RT = 7 cm, PQ = 6 cm, find
(a) the area of PQRS,
(b) the length of PN.

22. A door of length 2.5 m and width 1.5 m is fixed in a wall of length 8 m and width 5 m. Find the cost of white washing the wall at the cost of ` 25 per m^2.
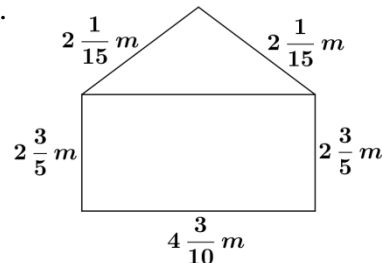
<p align="center">Section – D
<i>(Each question carries 4 marks)</i></p>

23. (a) Simplify, by using properties: $99\times 9+99$
(b) Subtract the sum of 304 and $\left(-709\right)$ from the sum of 919 and $\left(-217\right)$.

24. Find perimeter of the figure given alongside.

25. Price of petrol is ` 67.27 per litre and price of diesel is ` 56.98 per litre. Raju has to fill the tank of his petrol car with 13 litres and diesel car with 29 litres. Calculate the total amount spent on fuel.

26. The table below shows the flavours of ice-cream liked by the children of a society:

Flavour	Vanilla	Chocolate	Strawberry
Boys	4	9	3
Girls	8	12	7

Represent the above data as a double bar graph.

**27.** In the figure given alongside $\angle AOC=90°$. Write
(a) a pair of adjacent angles,
(b) a pair of complementary angles,
(c) a pair of supplementary angles,
(d) a pair of vertically opposite angles.
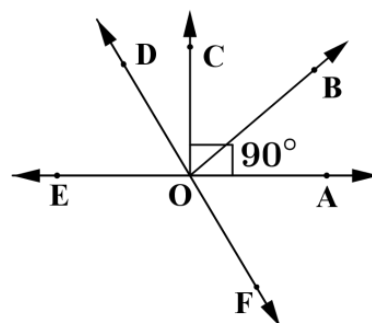
28. (a) Compare $\dfrac{-5}{6}$ and $\dfrac{13}{-15}$

(b) Represent $\dfrac{-3}{5}$ on a number line.

29. In the figure given alongside, two circles of radius 14 cm and 7 cm have been drawn inside a circle of radius 21 cm.

Find the area of the shaded region. (Use $\pi = \dfrac{22}{7}$)
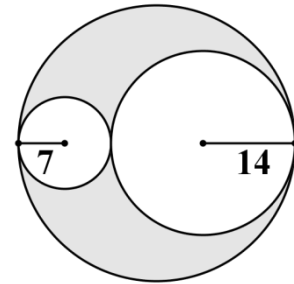
30. Priyanka took a wire and bent it in the form of a circle of radius 14 cm, and then she re-bent it into a rectangle with one side 24 cm long. What is the length of the other side of the rectangle? Find the area of both the figures. Which figure encloses more area?

OR

Two cross roads each of width 3 m, run at right angles, through the centre of a rectangular park of length 60 m and breadth 33 m, are parallel to the sides of the rectangular park. Find the area of roads in hectares. Also find the cost of constructing the roads at the rate of ` 80 per m².