

CLASS VI
MATHEMATICS
SET A

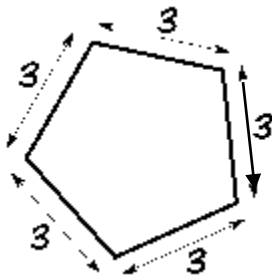
General Instruction:

- All questions are compulsory.
- Questions 1 to 8 carry 1 mark each.
- Questions 9 to 14 carry 2 mark each.
- Questions 15 to 24 carry 3 mark each.
- Questions 25 to 34 carry 4 mark each.

SECTION A

$$8 \times 1 = 8$$

1. Which is the smallest positive integer?
2. Write the terms of the expression $3a + 2b$.
3. Find the value of x in the equation: $x - 1 = 2$
4. Express as ratio. The ratio of 8 books to 20 books.
5. What is the sum of angles of a Triangle?
6. Calculate the perimeter of the following figure. (Given measures are in cm)



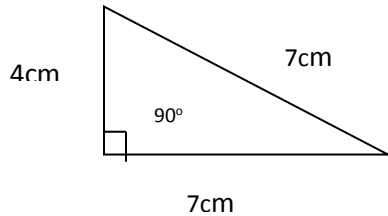
7. What is the name of the eight-sided polygon?
8. Draw a circle of radius 3.5cm.

SECTION B

$$6 \times 2 = 12$$

9. Arrange the following integers in the ascending order.
 $-2, 1, 0, -3, +4, -5, +2, -7$
10. Which ratio is greater? 3:5 or 3:7

11. Determine by substitution, if **3** is a root of the equation $5x + 3 = 18$.
12. Add the following: $m + 40m + m + 7 + 18$
13. The side of a square garden is **200m**. Find the area of the garden.
14. Identify the type of triangle according to the given length of sides and magnitude of angle.



SECTION C

$$10 \times 3 = 30$$

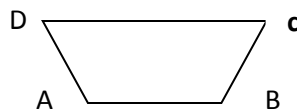
15. Solve to find the value of the unknown
 - a) $\frac{9m}{18} = 1$
 - b) $2x = 20$
16. Simplify: $15 - (-10 + 8)$
17. Form algebraic expression for the following.
 - a) x divided by **5** and added to **7**
 - b) $7ac$ subtracted from $9ac$
18. Write the following as algebraic equation and solve.
Thrice a number y is **24**. What is y ?
19. Draw a line segment of length **8cm**. Then draw a perpendicular bisector of this line.
20. State which of the following are in proportion
 - a) $2 : 10 :: 3 : 15$
 - b) $3 : 6 :: 4 : 2$
21. How many square tiles with dimension **5cm** can be fixed on a small surface whose length is **20cm** and breadth is **25cm**?

22. Given below is an isosceles trapezium. Answer the following questions.

a) Is $AB \parallel CD$? Yes/No

b) Is $\overline{AD} = \overline{BC}$? Yes/No

c) Is $AB = CD$? Yes/No



23. In a school, the ratio of the number of large classrooms to small classrooms is **3:4**. If the number of small rooms is **20**, then find the number of large rooms.

24. The number of Mathematics books sold by a shopkeeper on six consecutive days is shown below:

Days	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday
Number of books sold	65	40	30	50	20	70

Draw a bar graph to represent the above information choosing the scale of your choice.

SECTION D

$$10 \times 4 = 40$$

25. Add $(-3) + (+9)$

Subtract $(-20) - (+10)$

26. Multiply $3bc \times 12bc$

Divide $6a^2x^3y \div 2axy$

27. Write algebraic equation for each of the following statements.

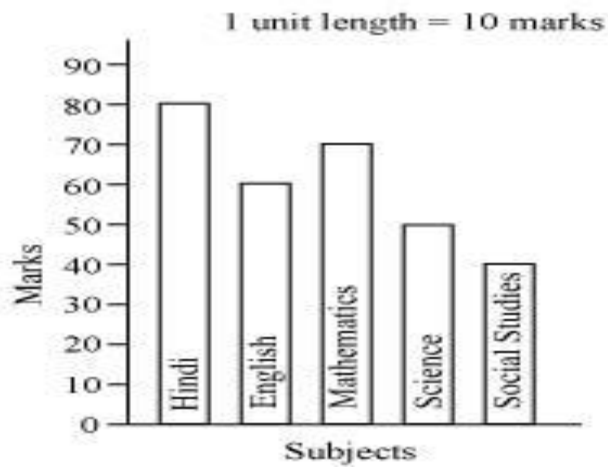
a) The sum of two consecutive numbers is **61**.

b) A number n divided by **6** is **10**.

c) The difference of two numbers is **8**.

d) The product of m and m is **16**.

28. Saleem drives his car at a constant speed. If he travels **8km** in **10minutes**, how long will he take to travel **32km**?
29. The sum of two angles is equal to **90 degrees**. The ratio of measures of these angles is **4:5**. What are the measures of these angles?
30. Find the cost of tiling the floor of a room at the rate of **Rs10** per m^2 , where the room measures **350m** long and **100m** broad.
31. Using ruler and compasses, construct angles of measures given below and bisect them.
- a)**90°** b)**60°**
32. John goes for his daily morning walk and takes **4 rounds** of a park with length and breadth **525m** and **100m** respectively. How many kilometers does he walk daily?
33. Classify the following triangles as acute-angled, right-angled, or obtuse-angled triangle according to the magnitude of their angles.
- a) **55°, 75°, 50°** b) **45°, 45°, 90°**
- c) **55°, 100°, 25°** d) **60°, 60°, 60°**
34. Observe this bar graph which shows the marks obtained by Maryam in SA-II examination in different subjects.



Answer the given questions.

- (a) What information does the bar graph give?
- (b) Name the subject in which Maryam scored maximum marks.
- (c) Name the subject in which she has scored minimum marks.
- (d) Prepare a frequency chart for the name of the subjects and marks obtained in each of them.