

INTERNATIONAL INDIAN SCHOOL- DAMMAM
FIRST TERMINAL EXAMINATION (2017-18)

CLASS VIII
MATHEMATICS

SET-A

TIME: 3 HOURS
MAX.MARKS: 80

General Instructions

1. All questions are compulsory
2. Section A-Questions 1-5 carry 1 mark each
3. Section B-Questions 6-11 carry 2 marks each
4. Section C- Questions 12-20 carry 3 marks each
5. Section D- Questions 21-29 carry 4 marks each
6. There is no overall choice; however, internal choice has been given in section B , C & D

SECTION-A

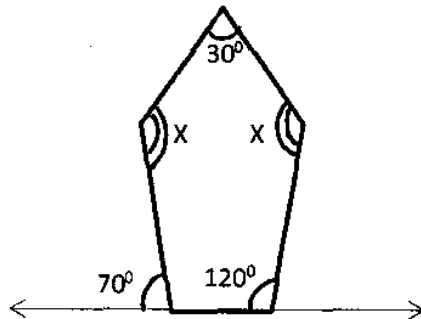
(1 X 5 = 5 MARKS)

1. Find the ratio of Rs 7 to 50 paise
2. Two quantities 'x' and 'y' are in _____ proportion if $xy=k$, where 'k' is a constant.
3. The unit digit of the square of 234 is _____
4. Find the angle sum of a convex polygon having 8 sides
5. Cube of 2^3 is _____

SECTION-B

(2 X 6 = 12 MARKS)

6. Find the square root of 16.81
7. Find the angle measure 'x' in the following figure



OR

7. Find the number of sides of a regular polygon whose each interior angle has a measure of 135°

8. An item marked at Rs 840 is sold for Rs 714. What is the discount and discount percentage?

9. If 'x' varies directly as 'y', then find the missing value and the constant

x	12	6
y	48	—

10. Using Euler's formula, find the unknown. $F=5, E=8, V=?$

11. Find the cube root of 3375 by prime factorisation method.

SECTION-C

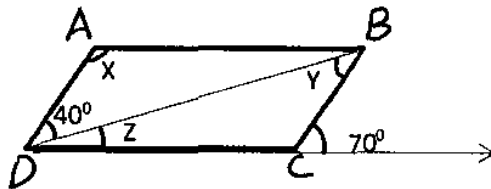
(3 X 9 = 27 MARKS)

12. Construct a rhombus 'PQRS' where $PR=6.5\text{cm}$ and $QS=6\text{cm}$

13. A machinery worth Rs 10500 depreciated by 5%. Find its value after one year.

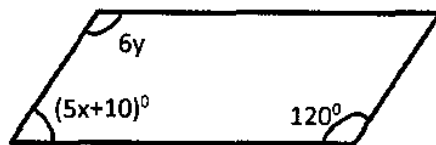
14. Find the smallest square number which is divisible by each of the numbers 6,9 and 15

15. In the figure 'ABCD' is a parallelogram, find the angle measure of x, y and z. State the properties used to find them.



OR

15. Find the value of x and y in the following parallelogram



16. Amrita weaves 30 baskets in 45 days, in how many days will she weave 120 baskets?

17. Construct parallelogram 'ABCD' where $BC=6\text{ cm}, CD=5\text{ cm}, BD=7.5\text{ cm}$

18. Is 392 a perfect cube? If not, find the smallest natural number by which 392 must be multiplied so that the product is a perfect cube.

19. The measures of two adjacent angles of a parallelogram are in the ratio 3:2. Find the measures of each of the angles of the parallelogram.
20. A camp of 200 people has sufficient food for 15 days. Due to arrival of some new people, the food last for 12 days only. How many more people arrived?

SECTION-D

(4 X 9 = 36 MARKS)

21. Construct a quadrilateral 'RICE' in which $RI = 5\text{cm}$, $IC = 6.5\text{cm}$, $\angle R = 60^\circ$, $\angle I = 100^\circ$, $\angle E = 95^\circ$
22. Is 1188 a perfect cube? If not, by which smallest natural number should 1188 be divided so that the quotient is a perfect cube? Also find the cube root of the new number obtained.
23. 'HOPE' is a rectangle, its diagonal meet at G. If $HG = 3x+2$ and $EG = 4x-3$, find x and also find the length of the diagonals (Lengths in cm)
24. Find the greatest 4 digit number which is a perfect square.
25. Construct a quadrilateral 'DEAR', $DE = 4\text{cm}$, $EA = 5\text{cm}$, $AR = 4.5\text{cm}$, $\angle E = 60^\circ$, $\angle A = 90^\circ$

OR

25. Construct a quadrilateral 'MIST' where $MI = 3.5\text{cm}$, $IS = 6\text{cm}$, $\angle M = 75^\circ$, $\angle I = 105^\circ$, $\angle S = 120^\circ$
26. Find the least number which must be added to 1300 so as to get a perfect square. Also find the square root of the perfect square.
27. A farmer sold two bullocks for Rs 18000 each. On one bullock he gained 20% and on the other he lost 20%. Find his overall gain or loss percentage.
28. A train is moving at a uniform speed of 75km/hour.
- How far will it travel in 20 minutes?
 - Find the time required to cover a distance of 250kms.
29. Calculate the amount and compound interest on Rs 80000 for $1\frac{1}{2}$ years at 10% per annum compounded annually.
-