



INDIAN SCHOOL DARSAIT
MATHEMATICS
SAMPLE PAPER



Class: VII

Max. Marks: 80

Date:

Time: 3 hr

General Instructions:

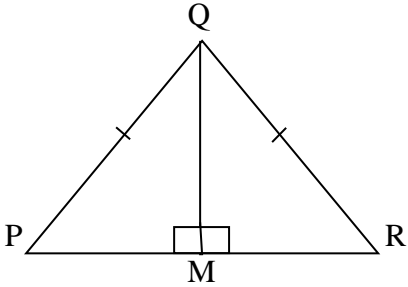
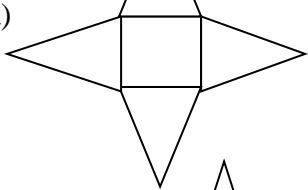
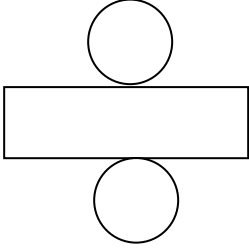
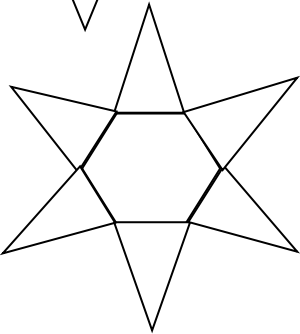
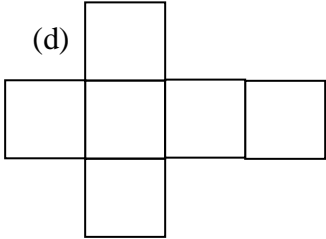
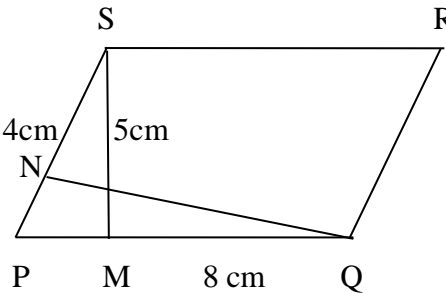
- (i) All questions are compulsory.
- (ii) Calculations should be shown in a working column on the right hand side.
- (iii) Section A : Questions 1-6 carry 1 mark each
Section B : Questions 7-12 carry 2 mark each
Section C : Questions 13-22 carry 3 mark each
Section D : Question 23- 30 carry 4 mark each

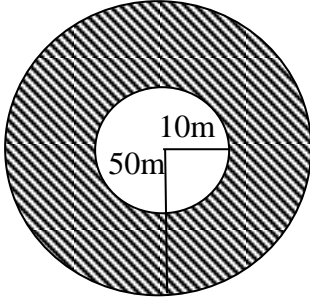
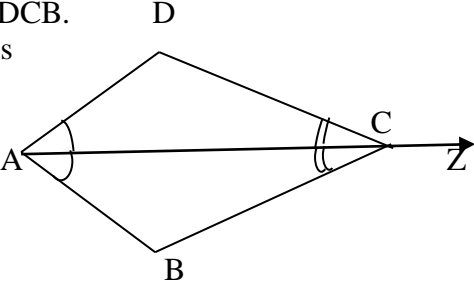
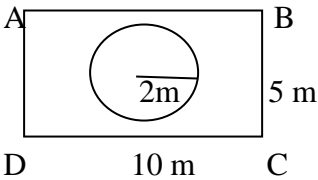
Section A

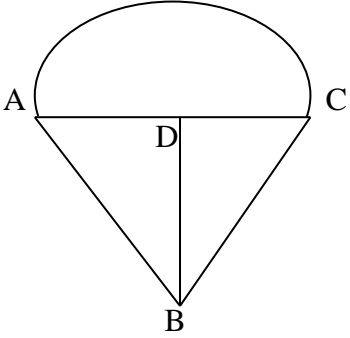
1	Convert the decimals into percent. 0.02	1
2	Evaluate : $(7^8 \times 7^4) \div 7^{10}$	1
3	The diameter of circle is 20cm. Find its circumference.	1
4	Write $\frac{-12}{36}$ in simplest form.	1
5	Find $(-723) \times (-56)$	1
6	Veena has to distribute 3L of juice equally into 8 glasses for her friends. What is the quantity of juice in each glass?	1

Section B

7	Saritha had Rs 10,500. She gave $\frac{3}{5}$ of it to her friend Geeta. How much money is left with her?	
8	Verify $(-67) \times 293 = 67 \times (-293)$	
9	Construct ΔLMN if $LM = 5$ cm, $\angle L = 60^\circ$ and $\angle M = 40^\circ$.	
10	Neha bought a camera for Rs 18500 and sold it to Sudha at a gain of 10%. What did Sudha pay for the camera.	

11	<p>State which pairs of triangles are congruent in the following figure. Also state the congruence criterion used to establish the congruence. Write reasons.</p> 	2
12	<p>Nets of some solids figure are shown below. Identify the figure and write their number of faces, vertex and edges</p> <div style="display: flex; justify-content: space-around;"> <div data-bbox="229 568 564 757"> <p>(a)</p>  </div> <div data-bbox="927 528 1219 775"> <p>(c)</p>  </div> </div> <div style="display: flex; justify-content: space-around; margin-top: 20px;"> <div data-bbox="236 725 632 1057"> <p>(b)</p>  </div> <div data-bbox="919 801 1246 1039"> <p>(d)</p>  </div> </div>	2
Section C		
13	<p>Construct a triangle ABC in which $\angle B = 60^\circ$, $\angle C = 45^\circ$ and $BC = 6\text{cm}$. Measure the third angle and verify the angle sum property.</p>	3
14	<p>Write any rational numbers between $\frac{-1}{2}$ and $\frac{-1}{3}$</p>	3
15	<p>Observe the given figure. SM and QN are the altitudes towards the sides PQ and SP of parallelogram PQRS. $PQ = 8\text{cm}$, $SP = 4\text{cm}$ and $SM = 5\text{cm}$.</p> <ol style="list-style-type: none"> Find the area of PQRS Find the length of QN. 	3
16	<p>Express the following statement as an algebraic equation and solve. If 5 is added to three times a number z the result is 42.</p>	3

17	Evaluate using properties of multiplication (a) $47 \times (-6) + (-47) \times 4$ (b) $42 \times (-97)$	3
18	A circus tent has a radius of 50m. The ring at the centre for the performance is 10m in radius. Find the area left for the audience. (Use $\pi = 3.14$) 	3
19	Simplify: $\frac{(2^3)^5 \times 3^2 \times 32}{27 \times 128 \times 2^7}$	3
20	In the figure AZ bisects $\angle DAB$ as well as $\angle DCB$. i) State the three pairs of equal parts in triangles BAC and DAC. Write the reasons. ii) Is $\triangle BAC \cong \triangle DAC$? Why? iii) Is $AB = AD$? Justify your answer. 	3
21	The total weight of 27 boxes of sweets is $20\frac{1}{4}$ kg. If each box weighs the same, find the weight of each box.	3
22	A book was bought for Rs 560 and sold for Rs 630. Find the gain and gain percent.	3
Section D		
23	Simplify and express in exponential form (a) 27×96 (a) $[(2^3)^2 \times (3^6)] \div 5^6$	4
24	The adjoining figure represents a rectangular lawn with a circular flower bed in the middle. Find  (1) the area of the whole land (2) the area of the flower bed (3) the area of the lawn excluding the area of the flower bed (4) the circumference of the flower bed.	4

25	<p>Do as directed</p> <p>(a) Write 658479 in expanded form</p> <p>(b) Write 145700000 in standard form</p> <p>(c) Write the number for the standard form 7.004×10^7</p> <p>(d) What is the value of $4 \times 10^5 + 3 \times 10^2 + 7 \times 10^0$</p>	4
26	<p>Find the area of the figure given below if $AC = 30\text{cm}$ and $BD = 35\text{cm}$.</p> 	4
27	<p>Construct the following triangles</p> <p>(a) $\triangle ABC$ with $AB = 7\text{cm}$, $BC = 3\text{cm}$ and $CA = 5\text{cm}$</p> <p>(b) $\triangle XYZ$ with $\angle Z = 90^\circ$, $XY = 6\text{cm}$ and $ZX = 4\text{cm}$</p>	4
28	<p>Solve the following</p> <p>(a) $\frac{12}{-7} \times \frac{21}{8}$</p> <p>(b) $\frac{-7}{88} \div \frac{77}{-121}$</p> <p>(c) $\frac{2}{3} - \frac{3}{4}$</p> <p>(d) $\frac{5}{18} + \frac{-7}{18}$</p>	4
29	<p>Reena invested Rs 70,000 at 5% rate of interest per annum for 2 years. She decided to donate the interest earned to an orphanage.</p> <p>(i) Find the amount donated by her.</p> <p>(ii) What value is depicted by this action?</p>	4
30	<p>Vijay had Rs 730 with him. He purchased stationary worth Rs 280.75 and bought three lights, each costing Rs 112.25. How much money is left with him?</p>	4