

Class : VII
Mid Term Exam 2022-2023
Subject: MATHEMATICS
Set A2

Time : 3 Hours

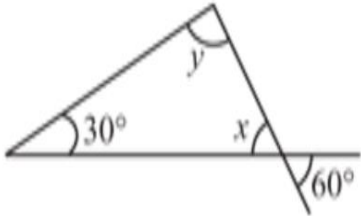
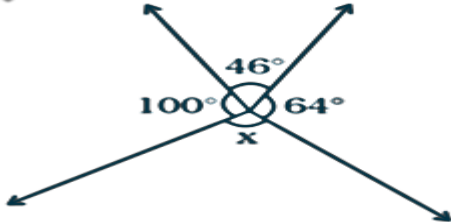
Max Marks : 80

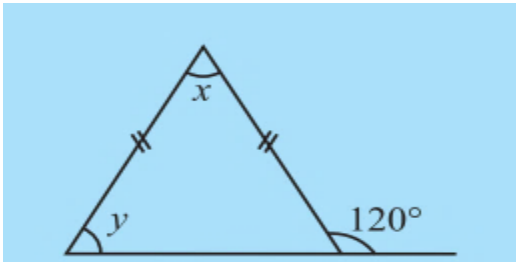
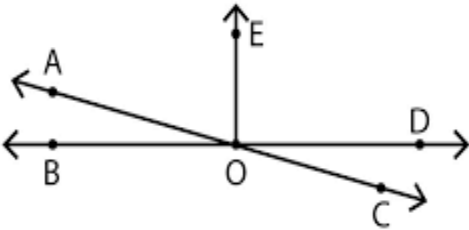
Note :

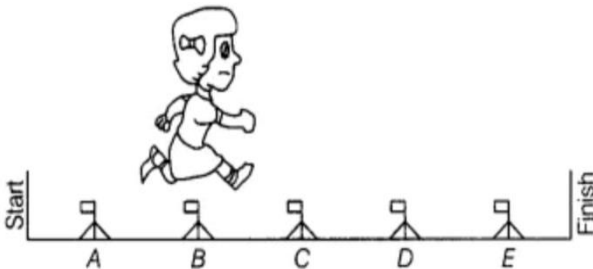
- (1) This question paper contains 6 printed pages.
- (2) Section A contains 15 questions of 1 mark each.
- (3) Section B contains 7 questions of 2 marks each.
- (4) Section C contains 7 questions of 3 marks each.
- (5) Section D contains 6 questions of 5 marks each.

Ques	<u>SECTION A</u>	Marks
1	Statement: ‘7 is multiplied by y and product subtracted from 5 gives 19’ Equation for the above statement is (a) $5 \times 7y = 19$ (b) $5 - 7y = 19$ (c) $7y - 5 = 19$ (d) $5y - 7 = 19$	1
2	Place value of digit 3 in 9.083 is (a) 3 (b) 1 (c) $\frac{3}{10}$ (d) $\frac{3}{1000}$	1
3	3 taken away from 0 gives (a) 3 (b) -3 (c) 0 (d) not possible	1
4	A line segment joining a vertex to the midpoint of the opposite side is called (a) altitude (b) bisector (c) median (d) line	1
5	‘Getting a number less than 1 on throwing a die.’ Above event can be classified as: (a) certain to happen (b) impossible to happen (c) may or may not happen (d) probability	1

6	<p>The triangle in which two altitudes are two of its sides is called</p> <p>(a) Obtuse angled triangle (b) Right angled triangle (c) Acute angled triangle (d) Isosceles triangle</p>	1
7	<p>The equation $t - 5 = 3$ in statement form can be written as .</p> <p>(a) t subtracted from 5 gives 3 (b) 3 subtracted from 5 gives t (c) 5 subtracted from t gives 3 (d) t subtracted from 5 gives 8</p>	1
8	<p>Supplement of 30° is</p> <p>(a) 0° (b) 30° (c) 60° (d) 150°</p>	1
9	<p>Mean of first four whole numbers is</p> <p>(a) 4 (b) 10 (c) 1.5 (d) 2.5</p>	1
10	<p>The marks (out of 100) obtained by a group of students in a science test are</p> <p>85, 76, 90, 85, 39, 48, 56, 95, 81 and 75.</p> <p>The range of the marks obtained is</p> <p>(a) 85 (b) 56 (c) 95 (d) 75</p>	1
11	<p>The temperature of a city is 4°C. Next day the temperature falls by 5°C. What is the temperature of the city next day ?</p> <p>(a) 1°C (b) -1°C (c) 9°C (d) 4°C</p>	1
12	<p>Value of $\frac{7}{2} \div \frac{8}{3}$ is</p> <p>(a) $2\frac{8}{3}$ (b) $\frac{28}{3}$ (c) $\frac{16}{21}$ (d) $\frac{21}{16}$</p>	1
13	<p>Shifting one term from one side of an equation to another side with a change of sign is known as</p> <p>(a) commutativity (b) transposition (c) distributivity (d) associativity</p>	1
14	<p>The solution of the equation $3x + 5 = 0$ is</p> <p>(a) $\frac{5}{3}$ (b) -5 (c) $-\frac{5}{3}$ (d) 5</p>	1

15	<p>The mode of the data 20, 26, 22, 29, 23, 29, 26, 29, 22, 23 is</p> <p>(a) 23 and 29 (b) 23 only (c) 29 only (d) 26 only</p>	1
<u>SECTION B</u>		
16	<p>Solve the following equation :</p> $-3(2x - 1) = 15$	2
17	<p>A rectangular sheet of paper is $9\frac{1}{3}$ cm long and $5\frac{1}{6}$ cm wide . Find its area .</p>	2
18	<p>Find median of the following data:</p> <p>1 , 16 , 15 , 6 , 15 , 8 , 17</p>	2
19	<p>Find the product using suitable property.</p> $(-125) \times 19 + 119 \times 125$	2
20	<p>Is there a triangle whose sides have lengths 10 cm, 5 cm and 4 cm? Give reasons.</p>	2
21	<p>From the following figure , find x and y.</p> 	2
22	<p>Find the value of x :</p> 	2
<u>SECTION C</u>		
23	<p>Evaluate :</p> $[(-15) + (-70)] \div [(20) + (-3)]$	3

24	Laxmi's father is 60 years old. He is 4 years older than four times Laxmi's age. What is Laxmi's age?	3
25	Age (in years) of 15 persons are given below : 65 65 63 60 63 60 64 63 60 64 60 63 60 65 63 Prepare a frequency distribution table based on above data.	3
26	Mrs. Asha baked a chocolate cake. She gave $\frac{1}{2}$ of it to her neighbour and ate $\frac{1}{4}$ of it. What fraction of the cake is left with her?	3
27	One of the angles of a triangle is 70° and the other two angles are equal. Find the measure of each of the equal angles.	3
28	From the given fig. find x, y . 	3
29	From the given figure, identify: (i) one pair of adjacent angles (ii) a linear pair (iii) a pair of vertically opposite angles 	3
<u>SECTION D</u>		
30	In a test (+5) marks are given for every correct answer and (–2) marks are given for every incorrect answer. (i) Radhika answered all the questions and scored 30 marks though she got 10 correct answers. How many incorrect answers she had attempted? (ii) Mohan got four correct and six incorrect answers. What is his score?	5

31	A 15 m long ladder reached a window 12 m high from the ground on placing it against a wall at a distance a. Find the distance of the foot of the ladder from the wall.	5																		
32	<p>Marks obtained in various subjects by Ravi of class 7th in 1st and 2nd term exam(out of 100) are given below:</p> <table><tr><td>Term</td><td>English</td><td>S.St.</td><td>Science</td><td>Hindi</td><td>Maths</td></tr><tr><td>1st term</td><td>60</td><td>80</td><td>90</td><td>65</td><td>80</td></tr><tr><td>2nd term</td><td>75</td><td>75</td><td>80</td><td>75</td><td>90</td></tr></table> <p>Draw a double bar graph for the given data.</p>	Term	English	S.St.	Science	Hindi	Maths	1 st term	60	80	90	65	80	2 nd term	75	75	80	75	90	5
Term	English	S.St.	Science	Hindi	Maths															
1 st term	60	80	90	65	80															
2 nd term	75	75	80	75	90															
33	<p>In a hurdle race, Tina is over hurdle B and $\frac{2}{6}$ of the way through the race, as shown in the given figure.</p>  <p>Then, answer the following:</p> <p>i) Where will Tina be,when she is $\frac{4}{6}$ of the way through the race? a) hurdle A b) hurdle C c) hurdle D d) hurdle E</p> <p>ii) If total distance to be covered in race is 300 m, then distance covered by Tina over hurdle E is a) 100 m b) 200 m c) 50 m d) 250 m</p> <p>iii) Fraction $\frac{2}{6}$ is a a) mixed fraction b) proper fration c) improper fration d) like fraction</p> <p>iv) An equivalent fraction of $\frac{2}{6}$ with denominator 30 is a) $\frac{30}{60}$ b) $\frac{1}{3}$ c) $\frac{20}{60}$ d) $\frac{10}{30}$</p> <p>v) Lowest form of $\frac{2}{6}$ is a) $\frac{1}{6}$ b) $\frac{5}{6}$ c) $\frac{1}{3}$ d) $\frac{6}{2}$</p>	5																		

34	<p>(A) State the property that is used in each of the following statements?</p> <p>(i) If $a \parallel b$, then $\angle 1 = \angle 5$.</p> <p>(ii) If $\angle 4 = \angle 6$, then $a \parallel b$.</p> <p>(iii) If $\angle 4 + \angle 5 = 180^\circ$, then $a \parallel b$</p> <p>(B) If $\angle 2 = 80^\circ$, then find value of $\angle 5$.</p> <div data-bbox="516 556 873 856" data-label="Image"> </div>	5
35	<p>In the figure given below, $AE \parallel CF$ and $AB \parallel CD$. Find x and y.</p> <div data-bbox="402 1066 792 1360" data-label="Image"> </div>	5