

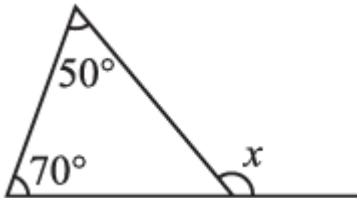
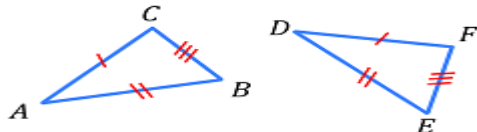
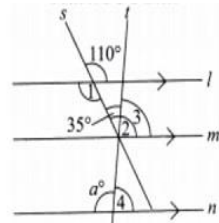
Session Ending Examination (2025-26)


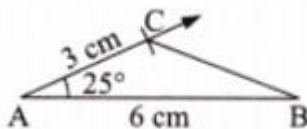
Class-7 Subject- Mathematics Practice set 01 (Marking Scheme)

Max.Marks: 60

Duration: 2:30 min

	Answers	
	Section A (From Q.1 to Q.10) MCQs	
1	Option (c) 93	1
2	Option (a) Convert the second fraction and multiply	1
3	Option (a)Even number	1
4	Option (b) odd numbers	1
5	Option (a) Transversal line	1
6	Option (d) 4	1
7	Option (c) SAS	1
8	Option (d) $(-17) \div (-12)$	1
9	Option (d) $\frac{6}{3}$ cups	1
10	Option (a) Exterior	1
11	Option (b) 72°	1
12	Option (c) $8 \div \frac{1}{4}$	1
13	Option (c) Shape and Size	1
14	Option (a) Both assertion and reason are true, and the reason is the correct explanation of the assertion.	1
15	Option (a) Both assertion and reason are true, and the reason is the correct explanation of the assertion.	1
	Section B (From Q.16 to Q.21) VSA	
16	<p>Here $\angle 1 + \angle 2 = 180$ [<i>Angles of a linear pair</i>] Given that $\angle 1 = 30^\circ$ $\angle 3 = 30^\circ$ (<i>vertically opposite angles are equal</i>) $\therefore 30^\circ + \angle 2 = 180$ (<i>Angles of linear pair</i>) $\angle 2 = 180^\circ - 30^\circ = 150^\circ$ $\angle 2 = \angle 4$ [<i>vertically opposite angles</i>] $\therefore \angle 4 = 150^\circ$ Hence $\angle 1 = 30^\circ, \angle 2 = 150^\circ, \angle 3 = 30^\circ, \angle 4 = 150^\circ$</p>	2
17	<p>(a) We choose Y=9 and Z=1 ,O=0 \therefore Puzzle becomes $\begin{array}{r} 99 \\ + 1 \\ \hline 100 \end{array}$ We take Z=1 and O =0 (b) We choose B=7 and D=0, E=1 \therefore Puzzle becomes $\begin{array}{r} 75 \end{array}$</p>	2

	<div><div>+30</div><div>-----</div><div>105</div><div>-----</div></div> <div>We take E=1</div> <div>∴ The solution is B = 7, D = 0, and E = 1</div>													
18	<div></div> <div>We know that an exterior angle of a triangle is equal to the sum of its interior opposite angles. So, $x = 50^\circ + 70^\circ = 120^\circ$</div>	2												
19	<div>In $\triangle DEF$ and $\triangle GED$ DF=DG (given) FE=GE.(given) DE=DE(common) Thus , the triangles satisfy the SSS condition . Hence In $\triangle DEF$ and $\triangle GED$ are congruent to each other .</div>	2												
20	<div>Here , AB=DE,BC=EF,CA=FD</div> <div></div> <div>All three corresponding sides are equal. Thus , Triangles are congruent by side-side-side congruence Hence , $\triangle ABC \cong \triangle DEF$</div>	2												
21	<div>(a) Sum =27,Difference=9 (b) Sum = -7, Difference=-13</div> <table><tr><th>First Number</th><th>Second Number</th><th>Sum</th><th>Difference</th></tr><tr><td>18</td><td>9</td><td>27</td><td>9</td></tr><tr><td>-10</td><td>3</td><td>-7</td><td>-13</td></tr></table>	First Number	Second Number	Sum	Difference	18	9	27	9	-10	3	-7	-13	2
First Number	Second Number	Sum	Difference											
18	9	27	9											
-10	3	-7	-13											
Section C (From Q.22 to Q.26)														
22	<div></div> <div>Here lines s and t are intersecting lines . So, $\angle 1=110^\circ$ [vertically opposite angles]</div>	3												

	<p>And $\angle 1 = \angle 2 = 110^\circ$ because lines l and m are parallel and line s is transversal line .</p> <p>Therefore $\angle 3 = \angle 2 - 35^\circ = 110^\circ - 35^\circ = 75^\circ$</p> <p>Also $\angle 3 = \angle 4 = 75^\circ$ [corresponding angles]</p> <p>So $\theta = 180^\circ - 75^\circ = 105^\circ$ [linear pair of angles]</p>	
23	 <p>Construction steps:</p> <ol style="list-style-type: none"> 1. Draw a line segment AB of length 5 cm. 2. Draw 75° at point A 3. Draw 75° at point at point B. 4. Let both the lines meet each other at point C. 5. Then ABC is a required triangle. <p>OR</p>  <p>Construction steps :</p> <ol style="list-style-type: none"> 1. Draw a line segment AB of 6 cm. 2. At point A, construct an angle of 25°. 3. From point A, cut an arc of 3 cm such that AC=3 cm. 4. Join BC to get the required triangle. 	3
24	<p>Initial temperature = 32°C</p> <p>Temperature decreases at = 5°C per hour</p> <p>Time = 10 hours</p> <p>Decrease in temperature after 10 hours</p> $= 32^\circ\text{C} + 10 \times (-5^\circ\text{C})$ $= 32^\circ\text{C} - 50^\circ\text{C}$ $= -18^\circ\text{C}$ <p>\therefore The room temperature after 10 hours will be -18°C.</p>	3
25	<p>Given: Rahim drinks $\frac{1}{2}$ glass of juice every day and we know that 1 week = 7 days.</p> <p>\therefore Number of glasses of juice = Number of days x Quantity of milk taken in 1 day.</p> $= 7 \times \frac{1}{2}$	3

	$= \frac{7}{2}$ $= 3 \frac{1}{2} \text{ glasses}$ <p>Hence Rahim drinks $3 \frac{1}{2}$ glasses of juice in a week.</p> <p>January has 31 days.</p> <p>Each day he drinks $\frac{1}{2}$ glass.</p> <p>No. of glasses of juice in January = $\frac{1}{2} \times 31 = \frac{31}{2} = 15 \frac{1}{2}$ glasses</p>	
26	<p>No, a triangle can't be constructed when all the angles are 70°. As $70^\circ + 70^\circ + 70^\circ = 210^\circ$ which is greater than 180°, and all the angles must up to 180° only. If the angles are 70°, Let $\angle A = \angle B = 70^\circ$ In $\triangle ABC$ $\angle A + \angle B + \angle C = 180^\circ$ (angle sum property) $70^\circ + 70^\circ + \angle C = 180^\circ$ $\angle C = 180^\circ - 140^\circ$ $\angle C = 40^\circ$ Let all the angles be equal. In $\triangle ABC$, $\angle A = \angle B = \angle C$ $\angle A + \angle B + \angle C = 180^\circ$ $\angle A + \angle A + \angle A = 180^\circ$ $\angle A = 60^\circ$ All the angles must be 60°.</p>	2
Section D (From Q.27 to Q .28)		
27	<p>Option (b) Each side must be less than the sum of the other two. Option (c) No, triangle inequality fails. Option (c) 3cm, 4cm, 5cm Option (c) Straight line, not a triangle</p>	4
28	<p>(a) The period of greco –Roamn era = End year-Start year $= 395\text{AD} - (330\text{BC})$ $= 395(+1) - (330)(-1)$ $= 395 + 330 = 725 \text{ years}$ (b) Age of Bhaskaracharya when he died = $(1185\text{AD}) - (1114\text{AD})$ $= (1185)(+1) - (1114)(+1)$ $= 1185 - 1114 = 71 \text{ years.}$ (c) Ruling period of queen Neferitis= Year in which turks ruled -2900 years $(1517\text{AD}) - 2900 = 1517(+1) - 2900 = 1517 - 2900$ $= -1383 = 1383(-1) = 1383\text{BC.}$ (d) Aristotle lived $(380\text{BC} - 322\text{BC})$ earlier than Archimedes $(287\text{BC} - 212\text{BC})$</p>	4
Section E (From Q.29 to Q .30)		
29	Let the number Rs1 coins be an odd number x.	5

	<p>Since 1 and x are both odd, the values of Rs1 coins is an odd number. Let the number of Rs 5 coins be an odd number y. Since 5 and y are both odd, the value of Rs 5 coins is an odd number. The sum of values of Rs1 coins and Rs5 coins are even number, because the sum two numbers is an even number. Let the number of Rs10 coins be an even number z. Since 10 and z are both even, the value of Rs10 coins is an even number. Since 205 is an odd number, the sum of values of all coins cannot be 205. Arjun made a mistake in calculating his total money.</p> <p>OR</p> <p>We are to use numbers 2,3,4,5,6,7,8,9,10. These numbers are one more than the numbers 1,2,3,4,5,6,7,8,9. The following is a magic square using the numbers 1,2,3,4,5,6,7,8,9.</p> <table border="1"> <tr><td>2</td><td>9</td><td>4</td></tr> <tr><td>7</td><td>5</td><td>3</td></tr> <tr><td>6</td><td>1</td><td>8</td></tr> </table> <p>We prepare a new 3x3 grid by adding 1 to each number in the above magic square as given below.</p> <table border="1"> <tr><td>3</td><td>10</td><td>5</td></tr> <tr><td>8</td><td>6</td><td>4</td></tr> <tr><td>7</td><td>2</td><td>9</td></tr> </table> <p>This is a magic square using the numbers 2 to 10.</p>	2	9	4	7	5	3	6	1	8	3	10	5	8	6	4	7	2	9	
2	9	4																		
7	5	3																		
6	1	8																		
3	10	5																		
8	6	4																		
7	2	9																		
30	<p>Part of Soma's land acquired by the government = $\frac{1}{6}$ Soma's original land = $1 - \frac{1}{6} = \frac{6-1}{6} = \frac{5}{6}$ (a) Part of the land given to Krishna = $\frac{1}{2}$ of original land = $\frac{1}{2} \times \frac{5}{6} = \frac{5}{12}$. (b) Part of the land given to Bora = $\frac{1}{3}$ of original land = $\frac{1}{3} \times \frac{5}{6} = \frac{5}{18}$. (c) Part of the land Soma kept for herself = $\frac{5}{6} - (\frac{5}{12} + \frac{5}{18}) = \frac{5}{6} - (\frac{3 \times 5 + 5 \times 2}{36}) = \frac{5}{6} - \frac{(15 + 10)}{36} = \frac{5}{6} - \frac{25}{36} = \frac{(6 \times 5 - 25)}{36} = \frac{(30 - 25)}{36} = \frac{5}{36}$. (d) Krishna and bora get in all = $\frac{5}{12} + \frac{5}{18} = \frac{15 + 10}{36} = \frac{25}{36}$ (e) Krishna</p> <p>OR</p> <p>The area of the framed photograph is $\frac{7644}{25}$ square cm</p>	5																		

	The End	
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