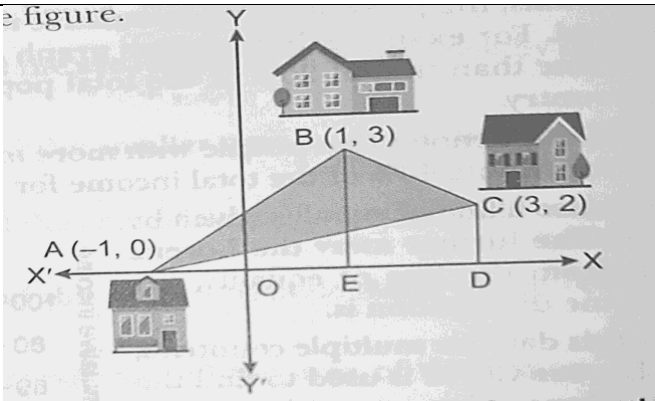


	<p style="text-align: center;">BCM SCHOOL BASANT AVENUE DUGRI ROAD LUDHIANA ASSIGNMENT (RELATION AND FUNCTIONS) CLASS XII SC</p>	
1	<p>The area bounded by the y-axis, $y = \cos x$ and $y = \sin x$ when $0 \leq x \leq \frac{\pi}{2}$ is</p> <p>(A) $(2\sqrt{2} - 1)$ sq units (B) $(\sqrt{2} - 1)$ sq units (C) $(2\sqrt{2} + 1)$ sq units (D) $(\sqrt{3} - 1)$ sq units</p>	1
2	<p>Area lying in the first quadrant and bounded by the circle $x^2 + y^2 = 4$ and the lines $x = 0$ and $x = 2$ is</p> <p>(A) π (B) 4π (C) 2π (D) $\frac{\pi}{2}$</p>	1
3	<p>Find the area of the region bounded by the curve $ay^2 = x^3$, the y-axis and the lines $y = a$ and $y = 2a$</p>	2
4	<p>Find the area of the region bounded by the curve $y = x^3$ and $y = x + 6$ and $x = 0$.</p>	2
5	<p>Find the area of a minor segment of the circle $x^2 + y^2 = a^2$ cut off by the line $x = \frac{a}{2}$.</p>	2
6	<p>Find the area of the region included between the parabola $y = \frac{3}{4}x^2$ and the line $3x - 2y + 12 = 0$</p>	3
7	<p>Draw a rough sketch of the given curve $y = 1 + x + 1$, $x = -3$, $x = 3$, $y = 0$ and find the area of the region bounded by them, using integration.</p>	4
8	<p>Location of three houses of society is represented by points A (-1,0), B (1,3), C (3,2) as shown in the figure.</p>  <p>Based on the above information, answer the following questions:</p> <p>i) find the equation of line AB, BC, AC ii) find the area of the region ABCD. iii) find the area of region ABC.</p>	