



MATHEMATICS CH-8-APPLICATION OF INTEGRALS

Name: _____

Date: _____

Class: XII Sec: ____

1. Find the area of the region bounded by the lines $3x-2y+1=0$, $2x+3y-21=0$ and $x-5y+9=0$.
2. Find the area of the region $\{(x,y)/x^2+y^2\leq 4 \text{ and } x+y\geq 2\}$.
3. Find the area bounded by the curve $x^2 = 4y$ and the straight line $x = 4y - 2$.
4. Find the area of the region enclosed between the circles $x^2+y^2=4$ and $(x-2)^2+y^2=4$.
5. Find the area of the region bounded by the parabola $y^2 = 4x$ and the circle $4x^2 + 4y^2 = 9$.
6. Find the area of the triangle with vertices $(-1,0)$, $(1,3)$, and $(3,2)$.
7. Find the area of the following region
 $\{(x,y):|x-1|\leq y\leq\sqrt{5-x^2}\}$
8. Find the area of the following region:
 $\{(x,y):|x+2|\leq y\leq\sqrt{20-x^2}\}$
9. Sketch the graph of $y = |x+3|$ and evaluate the area under the curve above x axis and between $x = -6$ to $x = 0$.
10. Find the area of the region bounded by the parabola $y^2 = 2x$ and the line $x-y = 4$.