

Area - Worksheet

Compute the area of the region R given in the problems.

1. R : $y = \sqrt{x}$, $y = 0$ and $x = 4$.
2. R : $x^2 + y^2 = 1$, $y + x^2 = 1$, $x \geq 0$, $y \geq 0$.
3. R : Triangle with vertices $(0, 1)$, $(3, 3)$, $(4, 1)$
4. R : Inside $r^2 = 4 \cos(2\theta)$.
5. R : Triangle with sides $3x + y = 3$, $x + y = 3$, and $y = 0$.
6. R : inside $r = 1 + \cos(\theta)$ & outside $r = 2 \cos(\theta)$.
7. R : $y = x \sin(x)$, $y = x$ for $0 \leq x \leq \pi$.
8. R : Inner loop of $r = 1 + 2 \cos(\theta)$.
9. R : $r = 2$ and $r = 4 \cos(\theta)$.
10. R : $x^2 + y^2 = 4$, $y = mx$, $x \geq 0$, $y \geq 0$.