

1. Find the area of the region bounded by the graphs of $f(x) = \cos x$, $g(x) = \sin x$, $0 \leq x \leq \frac{\pi}{2}$
2. Find the area of the region bounded by the graphs of $y^2 = 2x + 6$, $y = x - 1$
3. Find the area of the region bounded by the graphs of $y^4 = x$, $y = \sqrt{2 - x}$, $y = 0$

1. $2\sqrt{2} - 2$

2. 18

3. $\frac{22}{15}$