Problem Set 41: Area Between Curves

Find the area of the region bound by the functions.

1. $y = x + 4, x = 4$, the x-axis, the y-axis

2. $y = 3, y = -1, x = 2, x = 4$

3. $y = x^2 + 2x - 1, y = x + 1$

4. $y = \sin x, y = \cos x, x = 0, x = \frac{\pi}{2}$, the x-axis

5. $x = \sqrt{y}\,, x = \frac{y}{2}$

6. $x = y^2 , x = -2y + 8$