

7.2

① WAY #1

$$y^2 = x + 1 \quad y^2 = 3 - x$$

$$y^2 - 1 = x \quad y^2 - 3 = -x$$

$$\boxed{x^2 - 1 = y}$$

$$3 - y^2 = x$$

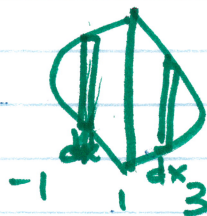
$$\boxed{3 - x^2 = y}$$

$$\int_{-\sqrt{2}}^{\sqrt{2}} (3 - x^2) - (x^2 - 1) dx = \boxed{7.542}$$

WAY #1.5

$$y = \pm \sqrt{x+1} \quad y = \pm \sqrt{3-x}$$

$$\int_{-1}^1 (\sqrt{x+1} - -\sqrt{x+1}) dx + \int_1^3 (\sqrt{3-x} - -\sqrt{3-x}) dx$$



WAY #2

$$x = y^2 - 1$$

$$x = 3 - y^2$$



$$\int_{-\sqrt{2}}^{\sqrt{2}} (3 - y^2) - (y^2 - 1) dy$$