

$$f(x) = \sqrt{m-x} + x \quad g(x) = \sqrt{x+1}$$

$$m-x \geq 0 \rightarrow m \geq x \quad x+1 \geq 0 \rightarrow x \geq -1$$

$$D_{f \circ g} = [-1, V] = [-1, m] \Rightarrow m = V$$

$$f(V) - g(V) = \sqrt{V-V} + V - \sqrt{1} = 6\sqrt{2}$$

$$\Rightarrow V + V - 2\sqrt{2} = 6\sqrt{2} \Rightarrow V = 4\sqrt{2} - 1$$

$$m+n = 4\sqrt{2} - 1 + V = 8 + 4\sqrt{2}$$

-10