

Whiteboard captures courtesy of Meg Ramsey: Thanks, Meg!!!

This is the work done by a student on the board in class. It relates to finding the domain of

$g(p) = \sqrt{2 - \sqrt{p}}$. We need to keep $p \geq 0$ for the \sqrt{p} part and then we need to keep $2 - \sqrt{p} \geq 0$ because it, too, is under a radical.

The whiteboard shows the following work:

$$2 - \sqrt{p} \geq 0$$
$$-\sqrt{p} \geq -2$$
$$\sqrt{p} \leq 2$$
$$\{p \mid p \leq 4 \text{ AND } p \geq 0\}$$

Below the algebra, a number line is drawn with arrows at both ends. The number 0 is marked with a small circle below the line. The number 4 is marked with a small circle below the line. A bracket above the line spans from 0 to 4, indicating the domain $0 \leq p \leq 4$.