Because we are dealing with root functions, $48 + \sqrt{x}$ is continuous on $[0, \infty)$, $\sqrt{x + 48}$ is continuous and nonzero on $(-48, \infty)$, so the quotient $f(x) = \dfrac{48 + \sqrt{x}}{\sqrt{48 + x}}$ is continuous on $[0, \infty)$. Since f is continuous at $x = 1$, $\lim\limits_{x \to 1} f(x) = f(1) = 7$.