

1.115  
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$$\left(3 \left(3^{\sqrt{x+3}}\right)^{\frac{1}{2\sqrt{x}}}\right)^{\frac{2}{\sqrt{x}-1}} = \frac{3}{\sqrt[10]{3}}$$

מגבלות המצוינות  
 $x \neq 0$   
 $x \neq 1$

$$3 \cdot 3^{\frac{\sqrt{x+3}}{2\sqrt{x}}} = 3^{1-\frac{1}{10}}$$

$$3 \left(1 + \frac{\sqrt{x+3}}{2\sqrt{x}}\right)^{\frac{2}{\sqrt{x}-1}} = 3^{\frac{9}{10}}$$

$$\left(\frac{2\sqrt{x} + \sqrt{x+3}}{2\sqrt{x}}\right)^{\frac{2}{\sqrt{x}-1}} = \frac{9}{10}$$

$$\frac{3\sqrt{x+3}}{\sqrt{x}(\sqrt{x}+1)} = \frac{9}{10}$$

$\sqrt{x} = t$  (NO)

$$\frac{3t+3}{t^2-t} = \frac{9}{10}$$

$$30t+30 = 9t^2-9t \quad /:3$$

$$3t^2 - 13t - 10 = 0$$

$$t = 5 \rightarrow \sqrt{x} = 5 \rightarrow \boxed{x = 25}$$

$$t = -\frac{2}{3} \rightarrow \sqrt{x} = -\frac{2}{3} \rightarrow \emptyset$$