

1.97  
4

$$8 \cdot 3^{\sqrt{x} + \sqrt[4]{x}} + 9^{1 + \sqrt{x}} \geq 9^{\sqrt{x}}$$

$$8 \cdot 3^{\sqrt{x} + \sqrt[4]{x}} + 9 \cdot 3^{2\sqrt{x}} \geq 3^{2\sqrt{x}}$$

$$8 \cdot AB + 9B^2 \geq A^2 \quad | : A^2$$

$$9 \frac{B^2}{A^2} + 8 \frac{B}{A} - 1 \geq 0$$

$$9C^2 + 8C - 1 \geq 0$$

$$A = 3^{\sqrt{x}} \quad | \text{no}$$

$$B = 3^{\sqrt[4]{x}}$$

$$C = \frac{B}{A} \quad | \text{no}$$



$$\frac{1}{9} \leq \frac{B}{A} = \frac{3^{\sqrt[4]{x}}}{3^{\sqrt{x}}} \Rightarrow 3^{\sqrt{x}} \leq 9 \cdot 3^{\sqrt[4]{x}} \rightarrow \sqrt{x} \leq 2 + \sqrt[4]{x}$$

$$-1 \geq \frac{B}{A} = \frac{3^{\sqrt[4]{x}}}{3^{\sqrt{x}}} \rightarrow \emptyset$$

(non/nil)  
(fals)

$$t^2 \leq 2 + t$$

$$t^2 - t - 2 \leq 0$$



$$-1 \leq t \leq 2$$

$$-1 \leq \sqrt[4]{x} \leq 2$$

$$0 \leq x \leq 16$$

1 km

-2.2x