

If $\sqrt{x} + \sqrt{9} = \sqrt{64}$, what is the value of x ?

A) $\sqrt{5}$

B) 5

C) 25

D) 55

$$\sqrt{x} + \sqrt{9} = \sqrt{64}$$

$$\sqrt{x} + 3 = 8$$

$$(\sqrt{x}) = (5)^2 \rightarrow x = 25$$

$$\sqrt{a} \pm \sqrt{b} \neq \sqrt{a \pm b}$$

$$\sqrt{a} \cdot \sqrt{b} = \sqrt{a \cdot b}$$

$$\sqrt{4} \cdot \sqrt{9} = \sqrt{36} = 6$$

$$2 \cdot 3 = 6$$

$$\frac{\sqrt{a}}{\sqrt{b}} = \sqrt{\frac{a}{b}}$$

$$\begin{array}{r} \sqrt{x} + \sqrt{9} = \sqrt{64} \\ -\sqrt{9} \quad -\sqrt{9} \\ \hline \sqrt{x^2} = \sqrt{55} \end{array}$$

disagree

$$x = 55$$

$$8 - 3 = 5$$

$$\sqrt{64} - \sqrt{9}$$

$$\sqrt{64-9} \neq \sqrt{55} = 7.41 \dots$$

If $(\sqrt{x} + \sqrt{9})^2 = (\sqrt{64})^2$, what is the value of x ?

A) $\sqrt{5}$

B) 5

C) 25

D) 55

$$\begin{array}{r} x + 9 = 64 \\ -9 \quad -9 \\ \hline x = 55 \end{array}$$

disagree

$$\sqrt{x} + \sqrt{9} = \sqrt{64}$$

$$\begin{array}{r} \sqrt{x} + 3 = 8 \\ -3 \quad -3 \\ \hline \sqrt{x} = 5 \end{array}$$

$$\sqrt{x} = 5^2$$

$$x = 25$$

$$(\sqrt{x} + \sqrt{9})^2 = (\sqrt{64})^2$$

$$64$$

$$(a+b)^2 \neq a^2 + b^2$$

$$a^2 + 2ab + b^2$$