

Lesson 2.3: Solving Radical Equations Graphically

Example 1

Review: Algebraically solve the following $\sqrt{x+5} = x+3$

exact
values

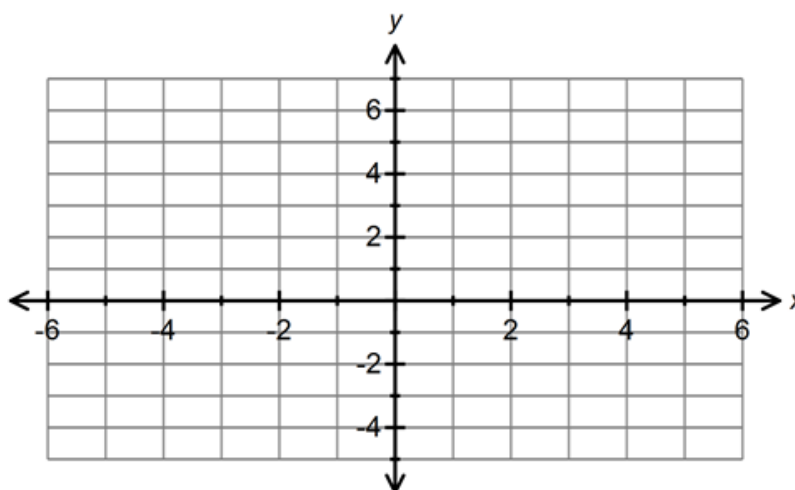
Solve graphically using a system of equations.

↳ determine the
point of intersection

approximate
values

$$y_1 = \sqrt{x+5}$$

$$y_2 = x+3$$

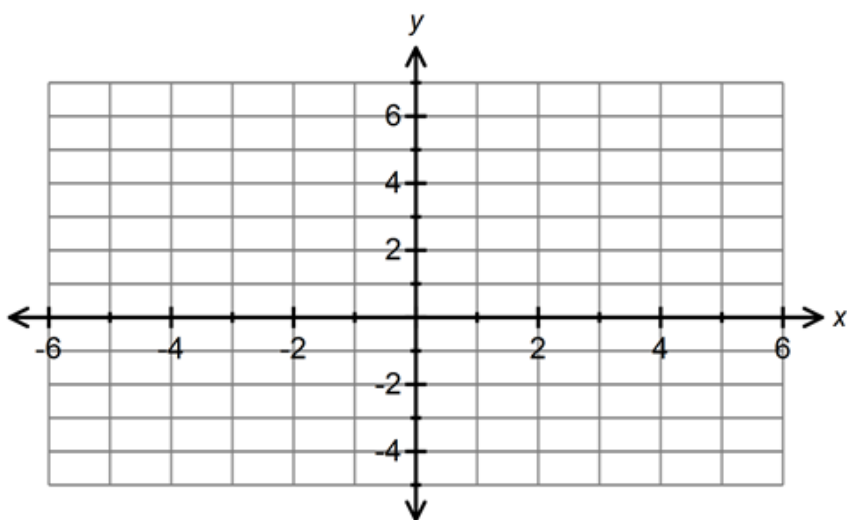


Solution

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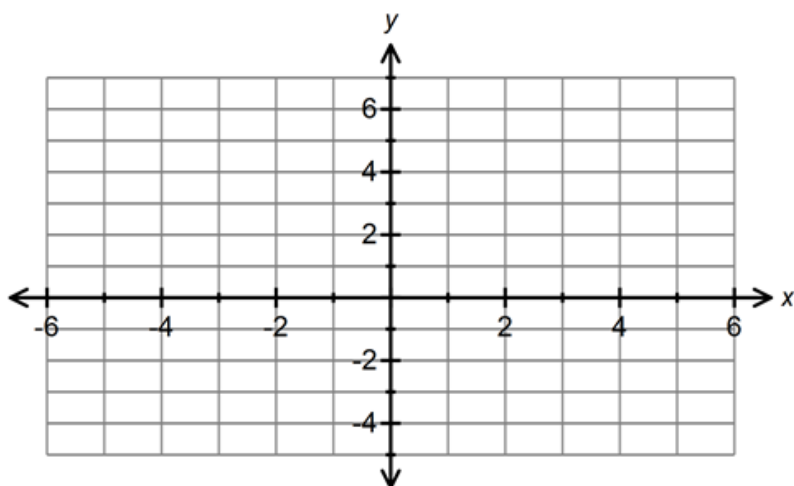
Example 2

Solve the equation $\sqrt{x+5} = 2$ graphically.



Example 3

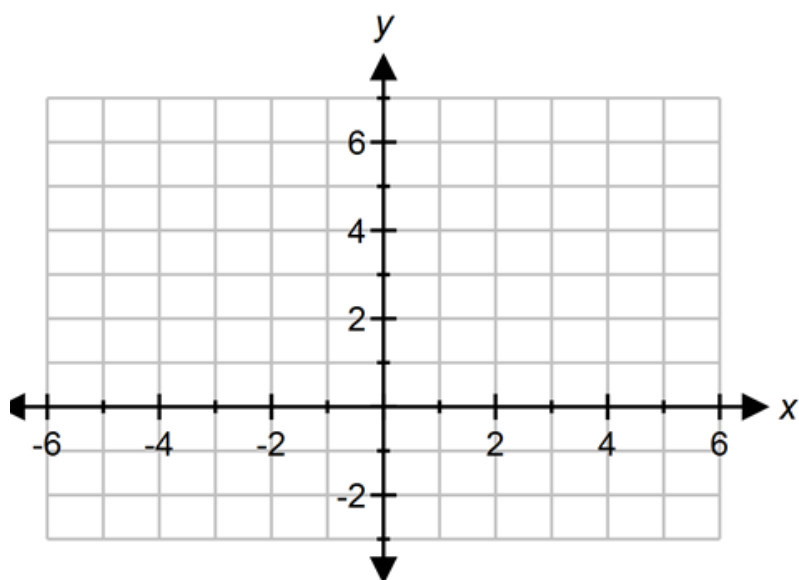
Solve the equation $\sqrt{x^2 - 1} = x + 3$ graphically.



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Your Turn

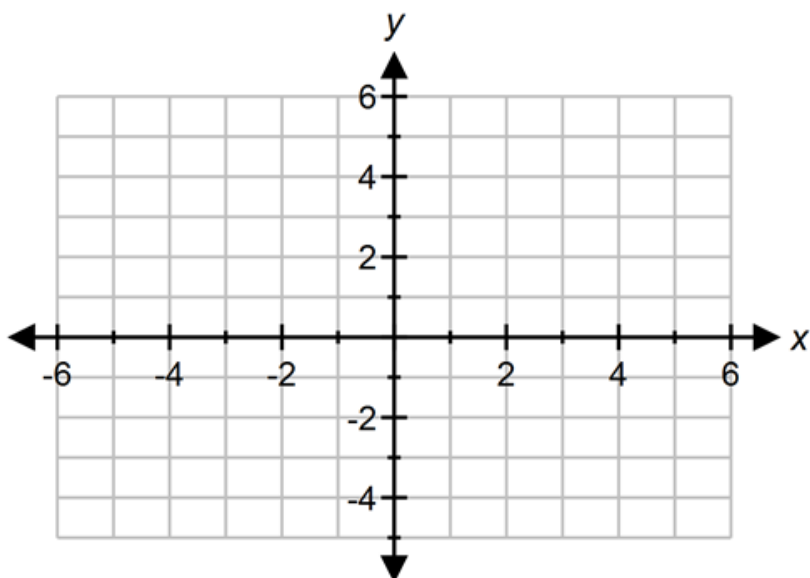
Solve the equation $\sqrt{4-x} = 1$ graphically.



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Your Turn

Solve the equation $\sqrt{3x^2 - 11} = x + 1$ graphically.



Assign P.96 #5b, 6b