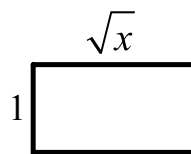
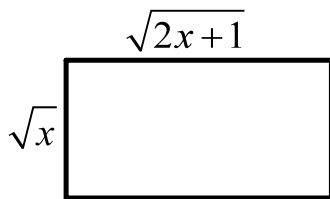


Try this:

If the difference between the lengths of the diagonals of the two rectangles shown equals 2 m, then determine the dimensions of the rectangles.



Try these:

1. $\sqrt{2x-1} + \sqrt{x-1} = 1$

2. $\sqrt{x+1} + \sqrt{3x+1} = 2$

3. $\sqrt{3x-2} - 2\sqrt{x} = 1$

4. $2\sqrt{x+6} - \sqrt{2x+10} = 2$

5. $\sqrt{3x-2} - 1 = \sqrt{2x-3}$

Answers:

1. $x = 1$ ($x = 5$ is extraneous)

2. $x = 0$ ($x = 8$ is extraneous)

3. no solution ($x = 1$ and $x = 9$ are both extraneous)

4. $x = -5$ ($x = 3$ is extraneous)

5. $x = 2$, $x = 6$