

## 9.1 Practice - Solving with Radicals

Solve.

1)  $\sqrt{2x+3} - 3 = 0$

2)  $\sqrt{5x+1} - 4 = 0$

3)  $\sqrt{6x-5} - x = 0$

4)  $\sqrt{x+2} - \sqrt{x} = 2$

5)  $3 + x = \sqrt{6x+13}$

6)  $x - 1 = \sqrt{7-x}$

7)  $\sqrt{3-3x} - 1 = 2x$

8)  $\sqrt{2x+2} = 3 + \sqrt{2x-1}$

9)  $\sqrt{4x+5} - \sqrt{x+4} = 2$

10)  $\sqrt{3x+4} - \sqrt{x+2} = 2$

11)  $\sqrt{2x+4} - \sqrt{x+3} = 1$

12)  $\sqrt{7x+2} - \sqrt{3x+6} = 6$

13)  $\sqrt{2x+6} - \sqrt{x+4} = 1$

14)  $\sqrt{4x-3} - \sqrt{3x+1} = 1$

15)  $\sqrt{6-2x} - \sqrt{2x+3} = 3$

16)  $\sqrt{2-3x} - \sqrt{3x+7} = 3$



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9.1

Answers - Solving with Radicals

1) 3

7)  $\frac{1}{4}$

13) 5

2) 3

8) no solution

14) 21

3) 1, 5

9) 5

15)  $-\frac{3}{2}$

4) no solution

10) 7

16)  $-\frac{7}{3}$

5)  $\pm 2$

11) 6

6) 3

12) 46



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