

A2.A.22: Solving Radicals 3: Solve radical equations

- 1 Solve for x : $\sqrt{3x-5} = 2$
- 2 Solve for x : $\sqrt{3x-5} = 5$
- 3 Solve for x : $7 = \sqrt{2x-5}$
- 4 Solve for x : $\sqrt{x+2} - 3 = 0$
- 5 Solve for x : $\sqrt{2x-2} - 2 = 0$
- 6 Solve for x : $\sqrt{5x+2} - 3 = 0$
- 7 Solve for x : $\sqrt{2x-4} - 6 = 0$
- 8 Solve for x : $\sqrt{2x+7} - 5 = 0$
- 9 Solve for x : $\sqrt{2x-8} - 1 = 5$
- 10 Solve for x : $\sqrt{x+18} - 2 = 2$
- 11 Solve for x : $\sqrt{2x-3} - 2 = 5$
- 12 Solve for x : $\sqrt{x+3} - 3 = -1$
- 13 Solve for x : $\sqrt{x+3} + 2 = 6$
- 14 Solve algebraically for x : $\sqrt{2x+1} + 4 = 8$
- 15 Solve for x : $\sqrt{3x-8} + 4 = 11$
- 16 Solve for x : $5 + \sqrt{3x-2} = 9$
- 17 Solve algebraically for x : $4 - \sqrt{2x-5} = 1$
- 18 Solve for x : $3\sqrt{2x+5} - 15 = 0$
- 19 What is the solution of the equation $\sqrt{5x-9} - 3 = 1$?
- 20 If $\sqrt{5-y} = 2$, find the numerical value of $(5-y)^2$.
- 21 When 4 is subtracted from 2 times a certain number, the square root of the result is 6. Find the number.
- 22 Which statement is true about the roots of the equation $\sqrt{x^2 - 5x + 5} = 1$?
 - 1) The only root is 1.
 - 2) The only root is 4.
 - 3) Both 1 and 4 are roots.
 - 4) Neither 1 nor 4 is a root.

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Answer Section

- 1 ANS:
3

PTS: 2 REF: 069401siii
- 2 ANS:
10

PTS: 2 REF: 068604siii
- 3 ANS:
27

PTS: 2 REF: 089304siii
- 4 ANS:
7

PTS: 2 REF: 088502siii
- 5 ANS:
3

PTS: 2 REF: 089604siii
- 6 ANS:
 $\frac{7}{5}$

PTS: 2 REF: 019805siii
- 7 ANS:
20

PTS: 2 REF: 060303siii
- 8 ANS:
9

PTS: 2 REF: 080303siii
- 9 ANS:
22

PTS: 2 REF: 069804siii
- 10 ANS:
-2

PTS: 2 REF: 010921b
- 11 ANS:
26

PTS: 2 REF: 069509siii

12 ANS:

1

PTS: 2

REF: 089503siii

13 ANS:

13

PTS: 2

REF: 019601siii

14 ANS:

$$\sqrt{2x+1} = 4$$

$$2x+1 = 16$$

$$2x = 15$$

$$x = \frac{15}{2}$$

PTS: 2

REF: 011628a2

15 ANS:

19

PTS: 2

REF: 069901siii

16 ANS:

6

PTS: 2

REF: 010105siii

17 ANS:

$$7. 4 - \sqrt{2x-5} = 1$$

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

$$2x-5 = 9$$

$$2x = 14$$

$$x = 7$$

PTS: 2

REF: 011229a2

18 ANS:

10

PTS: 2

REF: 019011siii

19 ANS:

5

PTS: 2

REF: 069708siii

20 ANS:

16

PTS: 2

REF: 018516siii

21 ANS:
20

PTS: 2

REF: 088406siii

22 ANS: 3

PTS: 2

REF: 019722siii