

Radical Equations

Solve each equation. Remember to check for extraneous solutions.

1) $-42 = -6\sqrt{5x+9}$

2) $70 = 10\sqrt{n+4}$

3) $\sqrt{x+2} = 9$

4) $\sqrt{r-10} = \sqrt{18-r}$

5) $\sqrt{3r+36} = \sqrt{-9-2r}$

6) $\sqrt{30-r} = r$

7) $a = \sqrt{-24+10a}$

8) $p = \sqrt{30+p}$

9) $x-6 = \sqrt{2x-4}$

10) $\sqrt{6k-11} = k-1$

Answers to Radical Equations

- 1) $\{8\}$
- 5) $\{-9\}$
- 9) $\{10\}$

- 2) $\{45\}$
- 6) $\{5\}$
- 10) $\{2, 6\}$

- 3) $\{79\}$
- 7) $\{6, 4\}$

- 4) $\{14\}$
- 8) $\{6\}$