

Radical Equations

Solve each equation. Find the unknown variable.

1 $\sqrt{l+2} + \sqrt{l-1} = 3$

2 $-3 + \sqrt{m+59} = m$

3 $-v + \sqrt{4v-12} = -2$

4 $\sqrt{1-q} = \sqrt{-8-2q}$

5 $2\sqrt{3w-5} - 3\sqrt{w+1} = 0$

6 $\sqrt{-1-2n} = 2$

7 $6\sqrt{9x} = 18$

8 $11 = 2 + \sqrt{80p+1}$

9 $r = \sqrt{-4+4r}$

10 $\sqrt{-45+14n} = n$

Radical Equations

Answers

$$\boxed{1} \quad \sqrt{l+2} + \sqrt{l-1} = 3$$

$$l = 2$$

$$\boxed{2} \quad -3 + \sqrt{m+59} = m$$

$$m = 5$$

$$\boxed{3} \quad -v + \sqrt{4v-12} = -2$$

$$v = 4$$

$$\boxed{4} \quad \sqrt{1-q} = \sqrt{-8-2q}$$

$$q = -9$$

$$\boxed{5} \quad 2\sqrt{3w-5} - 3\sqrt{w+1} = 0$$

$$w = \frac{29}{3}$$

$$\boxed{6} \quad \sqrt{-1-2n} = 2$$

$$n = -\frac{5}{2}$$

$$\boxed{7} \quad 6\sqrt{9x} = 18$$

$$x = 1$$

$$\boxed{8} \quad 11 = 2 + \sqrt{80p+1}$$

$$p = 1$$

$$\boxed{9} \quad r = \sqrt{-4+4r}$$

$$r = 2$$

$$\boxed{10} \quad \sqrt{-45+14n} = n$$

$$n = (9, 5)$$