Here we are getting the radical by itself (if it isn't already by itself), then squaring, and solving the resulting linear equation.

1.
$$\sqrt{x-1} + 7 = 9$$

2.
$$\sqrt{x+9} - 1 = 11 \ x = 135$$

3.
$$\sqrt{2x+18}-3=7$$

4.
$$\sqrt{5x-1}-5=3$$
 $x=13$

5.
$$\sqrt{4x-3}-7=-6$$

6.
$$\sqrt{5x + 46} - 3 = 1 \times = -6$$

$$7. \sqrt{3x - 11} + 5 = 7$$

8.
$$\sqrt{x+3} - 6 = -1 x = 22$$