

## Radical Equations

## Single Radical

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

2.  $\sqrt{2x^2 - 9} = x$

3.  $\sqrt{7x^2 - 14} = 10 - x$

4.  $\sqrt{19x^2 - 4} = x$

5.  $\sqrt{x^2 - 4x + 8} + x = 2 - x$

6.  $5 - 2x = \sqrt{2x^2 + x - 1} - x$

7.  $6y - \sqrt{2y^2 - 1} = 7y - 2$

8.  $z + 2 = \sqrt{2z^2 + 3z + 7} - 3$

9.  $\sqrt{w^2 - w + 3} - 1 = 2w$

10.  $x = 3 + \sqrt{x^2 - 9}$

**Answers****Radical Equations****Single Radical**

1.  $x = \frac{1}{4}$

2.  $x = 3$

3.  $x = -\frac{19}{3}, x = 3$

4.  $x = \frac{\sqrt{2}}{3}$

5.  $x = -\frac{2}{3}$

6.  $x = -13, x = 2$

7.  $y = -5, y = 1$

8.  $z = -2, z = 9$

9.  $w = \frac{1}{3}$

10.  $x = 3$