## **Radical Equations**

Name:	Date:	Score:

Direction: Solve each radical equation. Check your answers to exclude extraneous solutions. Show all your work in the space provided.

1) 
$$2\sqrt{x-1} - \sqrt{x} = 1$$

2) 
$$\sqrt{2x-2} + 5 = x$$

3) 
$$\sqrt{2x+2}\sqrt{x-1} = 1$$

$$4) \quad \sqrt{2x+1}\sqrt{2x-1} = x$$

Name: \_\_\_\_\_ Date: \_\_\_\_ Score: \_\_\_\_\_

Direction: Solve each radical equation. Check your answers to exclude extraneous solutions. Show all your work in the space provided.

1) 
$$2\sqrt{x-1} - \sqrt{x} = 1$$

2) 
$$\sqrt{2x-2} + 5 = x$$

$$x = \frac{25}{9}$$

$$x = 9$$

3) 
$$\sqrt{2x+2}\sqrt{x-1} = 1$$

$$4) \quad \sqrt{2x+1}\sqrt{2x-1} = x$$

$$x = \frac{\sqrt{6}}{2}$$

$$x_1 = \frac{\sqrt{3}}{3}$$
,  $x_2 = -\frac{\sqrt{3}}{3}$