C11 - 5.4 - Prep Radical Equations HW

Square the following

$\sqrt{x}$

$\sqrt{-x}$

$x+2$

$x+1$

$3\sqrt{x}$

$-\sqrt{x}$

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

$\frac{\sqrt{2x}}{5}$

$\sqrt{x-1}$

$\sqrt{x+2}$

$2\sqrt{x+2}$

$-2\sqrt{x+2}$

$\sqrt{x}+\sqrt{5}$

$\sqrt{2x}+7$

$\sqrt{x}-2$

$3\sqrt{x}-4$

$2+\sqrt{x-2}$

$8+\sqrt{x-7}$

$\sqrt{x+2}+\sqrt{x-1}$

$\sqrt{x-1}+\sqrt{x-1}$

C11 - 5.4 - Radical Equations HW

Solve the following equations by squaring both sides, possibly do algebra first.

$\sqrt{x} = 5$

$\sqrt{x} = 6$

$\sqrt{x} - 2 = 6$

$\sqrt{x} + 8 = 6$

$\sqrt{x} = -4$

$\sqrt{x+2} = 5$

$\sqrt{x-1} = -5$

$\sqrt{x+3} - 2 = 5$

$\sqrt{x} - 8 = -6$

$\sqrt{2x+3} = 5$

$\sqrt{3x-5} = 4$

C11 - 5.4 - Radical Equations HW

Solve the following equations by squaring both sides, possibly do algebra first.

$\sqrt{2x} = \sqrt{x+4}$

$\sqrt{x} = \sqrt{6-x}$

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

$\sqrt{2x-5} = \sqrt{x-1}$

$\sqrt{x+5} = \sqrt{2x+4}$

$\sqrt{4x-6} = \sqrt{2x+4}$

$2\sqrt{x+4} = 4$

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

$-5\sqrt{x-1} = 10$

C11 - 5.4 - Radical Equations HW

Solve the following equations by squaring both sides, possibly do algebra first.

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

$2\sqrt{x-5} = \sqrt{x+7}$

$2\sqrt{7x-6} = 3\sqrt{2x-8}$

$x = \sqrt{x+2}$

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

$x = \sqrt{4x-5}$

$2x = \sqrt{7x-3}$

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

C11 - 5.4 - Radical Equations HW

Solve the following equations by squaring both sides, possibly do algebra first.

$\sqrt{x+3} = x+1$

$\sqrt{2x+1} = 7-x$

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

$\sqrt{x+4} + 2 = x$

C11 - 5.4 - Radical Equations HW

Solve the following equations by squaring both sides, possibly twice. Isolate a root 1st.

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

$\sqrt{x+11} - \sqrt{x-4} = 3$

$\sqrt{x+35} = \sqrt{x+15} + \sqrt{x+3}$

6=4+2

$x = 1$

C11 - 5.4 - Restrictions HW

Find the Restriction, by setting underneath the root ≥ 0 *and solve*

$\sqrt{x-1}$ $\sqrt{x+2}$ $\sqrt{2x-3}$ $\sqrt{4x+1}$

$\sqrt{-x-1}$ $\sqrt{3-x}$ $\sqrt{-2x-3}$ $\sqrt{1-4x}$

$\sqrt{x^2-1}$ $\sqrt{4-x^2}$ $\sqrt{x^2+1}$ $\sqrt{x^2+4}$

$\sqrt{(x+1)(x-1)}$ $\sqrt{(x+2)(x-3)}$ $\sqrt{x^2+5x-6}$ $\sqrt{x^2-2x-3}$