Name: _____ Hour: _____ Date: _____

Solving Radical Equations Practice

Solve each equation. **CHECK FOR EXTRANEOUS SOLUTIONS…** it's the law.

$\sqrt{x} = 10$

$6 = \sqrt{v-2}$

$\sqrt{v-4} = 3$

$\sqrt{n+9} = 1$

$10\sqrt{9x} = 60$

$-8 + \sqrt{5a-5} = -3$

$\sqrt{3n} = \sqrt{4n-1}$

$\sqrt{3n+12} = \sqrt{n+8}$

$$\sqrt{2k+40} = \sqrt{-16-2k}$$

$$\sqrt{11-x} = \sqrt{x-7}$$

Simplify each expression using the properties of exponents.

$$\frac{\left(2pm^{-1}q^{0}\right)^{-4} \cdot 2m^{-1}p^{3}}{2pq^{2}}$$

$$\frac{\left(2hj^{2}k^{-2} \cdot h^{4}j^{-1}k^{4}\right)^{0}}{2h^{-3}j^{-4}k^{-2}}$$

Convert between rational exponent and radical forms.

$$6^{\frac{1}{3}}$$

$$11^{\frac{5}{3}}$$

$$\sqrt[7]{x^{2}}$$

$$\sqrt{t}$$

Simplify using the properties of rational exponents.

$$\left(a^{8}\right)^{\frac{3}{2}}$$

$$\left(64m^{4}\right)^{\frac{3}{2}}$$