Name:_____

Radicals

- **Square Root**: The number c is a square root of a if: $c = \pm\sqrt{a}$ or $c^2 = a$

- **Principle Square Root**: The principle square root of a non negative number is the positive portion $c = \sqrt{a}$

- **Radical Sign**: $\sqrt{}$
    - The expression under the radical sign is the **radicand**.

- $\sqrt{a^2} = |a|$

$\sqrt{49}$ $-\sqrt{\dfrac{25}{144}}$

$\sqrt{120}$ $-3\sqrt{20}$

$6\sqrt{5292}$ $\sqrt{a^{14}}$ $a\sqrt{a^{14}}$

$-5\sqrt{36v^2}$

$8xy^2\sqrt{x^6y^9}$

$7x\sqrt{72x^4y^5}$

$\sqrt{64(5+b)^2}$

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

$\sqrt{18(25x^2+10x+1)}$