@ Simple Lesson on Exponents: Begin Lessons with a few <u>Inquiry Questions!</u> @
Exponents or Powers can be thought of as Special Multiplication!

$$4^0 = 1 \qquad 4^1 = 4 \qquad 4^2 = 16 \qquad @ \qquad 7^0 = 1 \qquad 7^1 = 7 \qquad 7^2 = 49 \qquad @ \qquad 9^0 = 1 \qquad 9^1 = 9 \qquad 9^2 = 81$$

Any Number to a 0 Power is 1!   Any Number to a 1 Power is itself !   Any other Power is Repeated Multiplication!

$$4^2 = 16 \text{ since } 4 \times 4 = 16 \qquad\qquad 7^2 = 49 \text{ since } 7 \times 7 = 49 \qquad\qquad 9^2 = 81 \text{ since } 9 \times 9 = 81$$

Combine Exponential Concepts into ASMD problems to promote success and excitement!

$$9^0 + 6^2 = \underline{\quad} \qquad\qquad 7^2 - 2^1 = \underline{\quad} \qquad\qquad 8^0 \times 4^2 = \underline{\quad} \qquad\qquad 6^2 / 3^1 = \underline{\quad}$$

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@ Simple Lesson on Radicals: Begin Lessons with a few <u>Inquiry Questions!</u> @
Radicals or Square Roots can be thought of as a <u>Special</u> <u>Division!</u>

$$\sqrt{1} \qquad \sqrt{4} \qquad \sqrt{9} \qquad \sqrt{16} \qquad \sqrt{25} \qquad \sqrt{36} \qquad \sqrt{49} \qquad \sqrt{64} \qquad \sqrt{81} \qquad \sqrt{100}$$

$$\sqrt{9} = 3 \text{ since } 3 \times 3 = 9 \qquad\qquad \sqrt{36} = 6 \text{ since } 6 \times 6 = 36 \qquad\qquad \sqrt{81} = 9 \text{ since } 9 \times 9 = 81$$

$$\sqrt{4} = ? \quad \text{Why?} \qquad\qquad \sqrt{25} = ? \quad \text{Why?} \qquad\qquad \sqrt{64} = ? \quad \text{Why?}$$

Combine Basic Radical Concepts into ASMD problems to promote success & excitement!

$$\sqrt{36} + \sqrt{25} = \underline{\quad} \qquad \sqrt{49} - \sqrt{4} = \underline{\quad} \qquad \sqrt{1} \times \sqrt{16} = \underline{\quad} \qquad \sqrt{81} / \sqrt{9} = \underline{\quad}$$