SC Algebra 1
8.3 Negative Exponents

How can I meet today's standards?

*I can apply the properties of exponents when simplifying expressions with **negative** and **zero exponents**.*

Warm Up: Complete 4 Minute Check-Up

Powers Quick Review:

Zero Exponents:

"If your exponent is zero, _____ will always be your hero."

Example 1:

Simplify each expression. Assume no denominator equals zero.

n^0 $(-387)^0$ $\left(-\frac{8m^2np^8}{9k^2mn^4}\right)^0$

$\frac{a^4b^0}{a^2}$ $\left(\frac{5q^3r^5t^2}{11rt^2}\right)^0$ $\frac{6u^2v^6w^0}{2uv^3}$

Negative Exponents:

"When your exponent is _____, although it's not typical! To do the math you need to flip to the _____."

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Example 2:

Simplify each expression. Assume that no denominator equals zero.

n^{-5} $(3)^{-2}$ m^4p^{-2}

$\frac{a^3b^{-4}}{c^{-2}}$ $\frac{-c^4f^{-2}}{d^{-7}e^3}$ $\frac{3g^{-3}h^2}{-36g^3hj^{-4}}$

Challenge Problem:

Simplify each expression. Assume that no denominator equals zero.

$$-\frac{\boldsymbol{8r^0t^{-3}v^{-10}}}{\boldsymbol{2rt^2v^{-5}}}$$