Mathematics Class Slides

Bronx Early College Academy

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How do we know the exponent rules work?

CCSS: algebra

Using the following examples, identify the applicable exponent rule and explain why it works.

1. $a^2 \cdot a^3 = a^{2+3} = a^5$

   $a \cdot a \times a \cdot a \cdot a = a \cdot a \cdot a \cdot a \cdot a$

2. $\frac{a^5}{a^3} = a^{5-3} = a^2$

   $$\frac{a \cdot a \cdot a \cdot a \cdot a}{a \cdot a \cdot a} = a \cdot a \times \left(\frac{a \cdot a \cdot a}{a \cdot a \cdot a}\right) = a \cdot a$$

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Using the following examples, identify the applicable exponent rule and explain why it works.
power rule, fractional and negative exponents; identify false appl

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