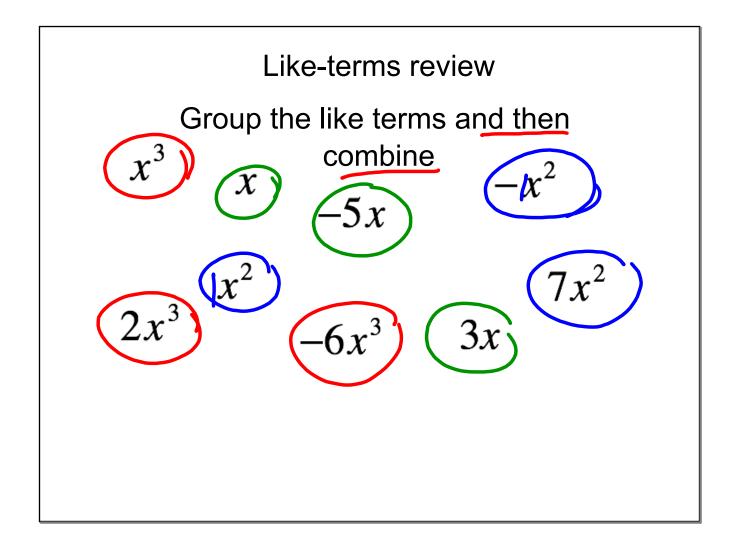
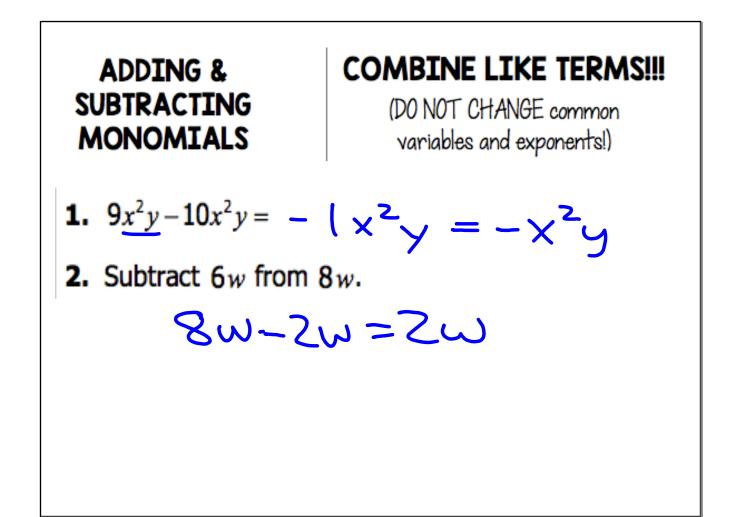
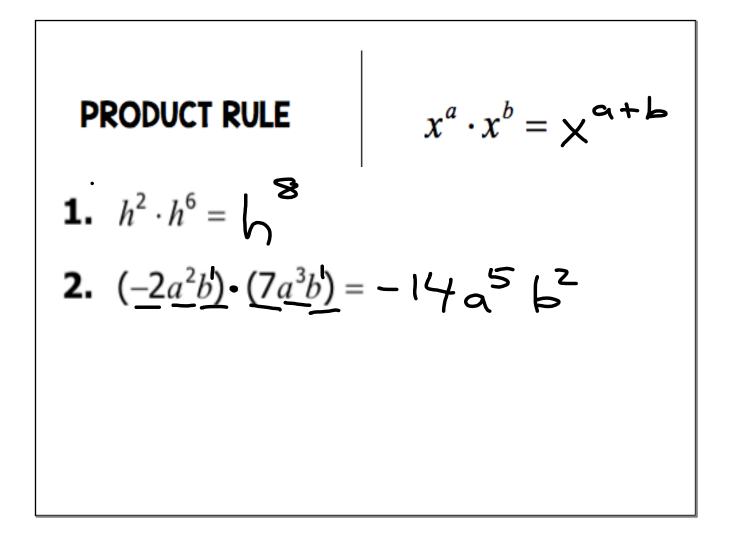
## 4-1 Exponent Rules Review

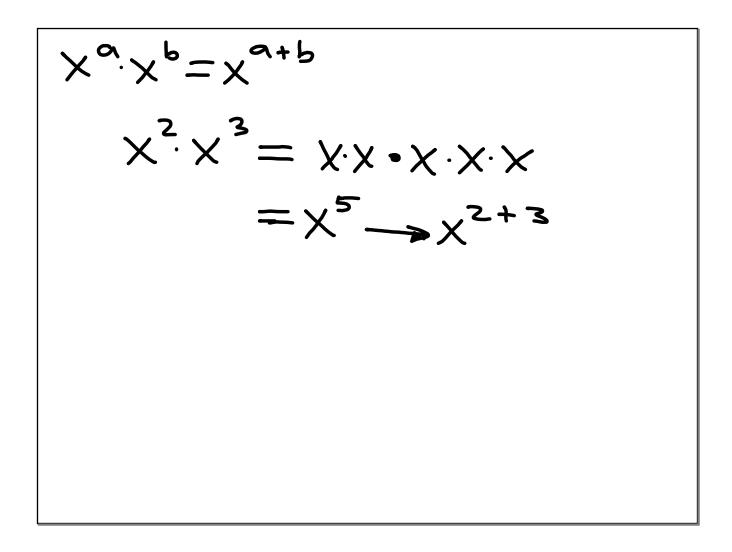
4-1a: I can use properties of exponents to simplify and evaluate exponential expressions.

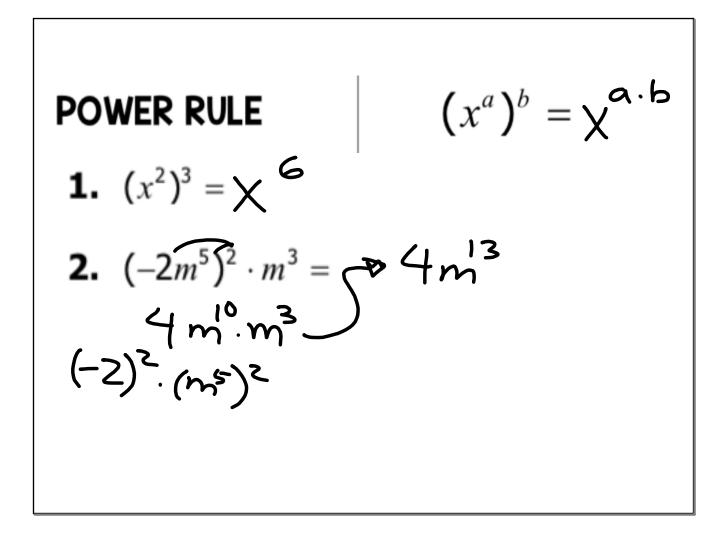


Name	Rule	Examples
ADDING & SUBTRACTING MONOMIALS	(DO NOT CHANGE common variables and exponents!)	<b>1.</b> $9x^2y - 10x^2y =$ <b>2.</b> Subtract $6w$ from $8w$ .
PRODUCT RULE	$x^a \cdot x^b =$	<b>1.</b> $h^2 \cdot h^6 =$ <b>2.</b> $(-2a^2b) \cdot (7a^3b) =$
POWER RULE	$(x^{a})^{b} =$	<b>1.</b> $(x^2)^3 =$ <b>2.</b> $(-2m^5)^2 \cdot m^3 =$
QUOTIENT RULE	$\frac{x^a}{x^b} =$	<b>1.</b> $\frac{27x^5}{42x} =$ <b>2.</b> $\frac{(y^2)^2}{y^4} =$
NEGATIVE EXPONENT RULE	$x^{-a} =$	<b>1.</b> $-5x^{-2} =$ <b>2.</b> $\frac{4k^2}{8k^5} =$
ZERO EXPONENT RULE	$x^0 =$	<b>1.</b> $7x^0 =$ <b>2.</b> $\frac{(w^4)^2}{w^8} =$









$$(\chi^{a})^{b} = \chi^{a \cdot b}$$

$$(\chi^{2})^{3} = \chi^{2} \cdot \chi^{2} \cdot \chi^{2}$$

$$= \chi \cdot \chi \cdot \chi \cdot \chi \cdot \chi \cdot \chi$$

$$= \chi^{6} \chi^{2 \cdot 3} \sqrt{2}$$

$$27 < \frac{3}{9} < \frac{42}{3} < \frac{3}{2} < \frac{3}{2}$$

