

Here is a disorganized list of algebraic rules that came up in class:

- $\frac{a}{b} \cdot \frac{c}{d} = \frac{a \cdot c}{b \cdot d}$
- $\frac{a}{b} \cdot c = \frac{a \cdot c}{b}$
- $\frac{a \cdot c}{b \cdot c} = \frac{a}{b}$
- $(a + b) \cdot c = a \cdot c + b \cdot c$
- $(a + b)^2 \neq a^2 + b^2$
- $\sqrt{a + b} \neq \sqrt{a} + \sqrt{b}$
- $\sqrt{a \cdot b} = \sqrt{a} \cdot \sqrt{b}$
- $(a \cdot b)^c = a^c \cdot b^c$
- $a^{b+c} = a^b \cdot a^c$
- $\frac{a/b}{c} = \frac{a}{b} \cdot \frac{1}{c} = \frac{a}{b \cdot c}$