

Positive and negative numbers. Absolute value of a number.

$$\begin{cases} |a| = a, & \text{if } a \geq 0 \\ |a| = -a, & \text{if } a < 0 \end{cases}$$

Complex fractions.

Complex fractions are formed by two fractional expressions, one on the top and the other one on the bottom, for example:

$$\frac{\frac{1}{2} + \frac{1}{3}}{\frac{7}{9} - \frac{2}{5}}$$

The fraction bar is a just another way to write the division sign, so we can re-write:

$$\frac{\frac{1}{2} + \frac{1}{3}}{\frac{7}{9} - \frac{2}{5}} = \left(\frac{1}{2} + \frac{1}{3}\right) \div \left(\frac{7}{9} - \frac{2}{5}\right)$$

It is easy to simplify a complex fraction:

$$\frac{\frac{1}{2} + \frac{1}{3}}{\frac{7}{9} - \frac{2}{5}} = \left(\frac{1}{2} + \frac{1}{3}\right) \div \left(\frac{7}{9} - \frac{2}{5}\right) = \frac{\frac{3}{6} + \frac{2}{6}}{\frac{35}{45} - \frac{8}{45}} = \frac{\frac{5}{6}}{\frac{27}{45}} = \frac{5}{6} \div \frac{27}{45} = \frac{5}{6} \cdot \frac{45}{27} = \frac{5}{1} \cdot \frac{5}{3} = \frac{25}{3}$$