Use Terms with Precision

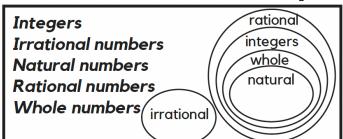
Another way to help students with their understanding of mathematics vocabulary is to emphasize formal mathematics language in the classroom. What follows are examples in which students might hear and see terms within the same unit or class period, and it is essential to understand the differences or similarities among or between terms.

Formal mathematics language is important because this is the type of language that students read in texts and on the STAAR. If students only experience informal mathematics language, it will be difficult for students to fully participate in mathematics and demonstrate their mathematics competency.

Each of these examples come from an article named *Math language in middle school: Be more specific* (Powell, Stevens, & Hughes, 2019). The article can be accessed here: https://doi.org/10.1177/0040059918808762

Here are examples of terms that should be used precisely within number and operations.

Terms That Require Specificity Number and Operations



Factor
$$2 \times 4 = 8$$

$$^{f_{O_{C_{l_{O_{r}}}}} f_{O_{C_{l_{O_{r}}}}}}$$
Multiple
$$8 \times 1 = 8$$

$$8 \times 2 = 16$$

Equation
$$9x - 4 = 7x$$

Expression $9x - 4$

Formula $a^2 + b^2 = c^2$

Function $f(x)$

Inequality $9x - 4 > 6x$

Improper fraction $\frac{8}{5}$

Mixed number $1\frac{3}{5}$

Proper fraction $\frac{2}{9}$

Improper fractionProportion
$$\frac{8}{5}$$
 $\frac{2}{5}$ = $\frac{8}{20}$ Mixed numberRatio $1\frac{3}{5}$ 4:3Proper fractionUnit fraction $\frac{2}{9}$ $\frac{1}{6}$

Powell, Stevens, & Hughes (2019)



Here are examples of terms that should be used precisely within geometry and measurement.

Terms That Require Specificity Geometry and Measurement

