

August 23, 2017

Math Jam Fridays

12:00 - 2:00

Rm # 320

Dr. Kidong

$$86 = 2 \cdot 43$$

2 43

Aug 23-8:56 AM

Aug 23-9:12 AM

Zero → 0

$$\mathbb{N} = \{1, 2, \dots\}$$

$$\mathbb{W} = \{0, 1, 2, \dots\}$$

whole

$$\mathbb{Z} = \{\dots, -2, -1, 0, 1, 2, \dots\}$$

Integers

$$\{0, \pm 1, \pm 2, \pm 3, \dots\}$$

or

$$\begin{aligned} 0 + a &= a \\ * \text{ Additive Identity} \\ 5 + 0 &= 5 \\ a + (-a) &= 0 \\ * \text{ Additive Inverse} \\ 5 + (-5) &= 0 \\ (-13) + 13 &= 0 \\ \xrightarrow[0]{+a} \xleftarrow[-a]{} \end{aligned}$$

Aug 23-9:16 AM

Aug 23-9:21 AM

$$\begin{array}{rcl} 5x + 5 & = & 25 \\ \text{A. Idl} \rightarrow 0 & - 5 & \\ \hline 5x + 0 & = & 20 \\ \text{A. Idl} & & \\ 5x & = & 20 \end{array}$$

$$\mathbb{Q} = \left\{ \frac{m}{n} \mid m \text{ and } n \in \mathbb{Z}, \text{ such that } n \neq 0 \right\}$$

Rational (Fractions)

Why n can not be zero?

$$\frac{4}{0} = \text{undefined}$$

Aug 23-9:27 AM

Aug 23-9:38 AM

Fractions $\rightarrow \mathbb{Q}$

$\frac{3}{4}$, $\frac{5}{8}$, $\frac{1}{9}$ Proper

$\frac{4}{3}$, $\frac{8}{5}$, $\frac{9}{1}$ Improper

$\frac{1}{4}$; 1.4; 0.25

$$\begin{array}{r} 0.25 \\ 4 \overline{)1.000} \\ -8 \\ \hline 20 \end{array}$$

Aug 23-9:47 AM