4.1 Introduction To Fractions And Mixed Numbers

Def. Fractions are use to represent a part of a whole.

Numerator < - - - number of parts being considered

Denominator < - - - number of equal parts in the whole

* Types of fraction

| Name | Example |
|---|-------------|
| A proper fraction is a fraction whose numerator is less than its denominator. | \bigoplus |
| A improper fraction is a fraction whose numerator is greater than or equal to its denominator. | |
| A mixed number contains a whole number and a fraction. | |

* Writing improper fraction as mixed number

To write a improper fraction as a mixed number, divide the numerator by denominator and write as

quotient — remainder — original denominator

Ex 1. Write as a mixed number or whole number.

a. $\frac{9}{5}$

- b. $\frac{23}{9}$
- c. $\frac{48}{4}$
- d. $\frac{51}{13}$
- e. $\frac{62}{17}$

st Writing mixed number as improper fraction

To write a mixed number as an improper fraction, multiply the denominator of fraction by whole number and add the result with the numerator of the fraction.

Ex 2. Write as an improper fraction.

a.
$$5\frac{2}{7}$$

b.
$$6\frac{2}{3}$$

c.
$$-4\frac{3}{11}$$

b.
$$6\frac{2}{3}$$
 c. $-4\frac{3}{11}$ d. $-2\frac{5}{13}$ e. $1\frac{6}{17}$

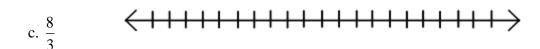
e.
$$1\frac{6}{17}$$

* Graphing fractions on a number line

Ex 3. Graph the fraction on a number line.

a.
$$\frac{4}{7}$$

b.
$$\frac{2}{3}$$



d.
$$\frac{5}{4}$$

e.
$$4\frac{3}{4}$$