BEST WAY TO UNDERSTAND
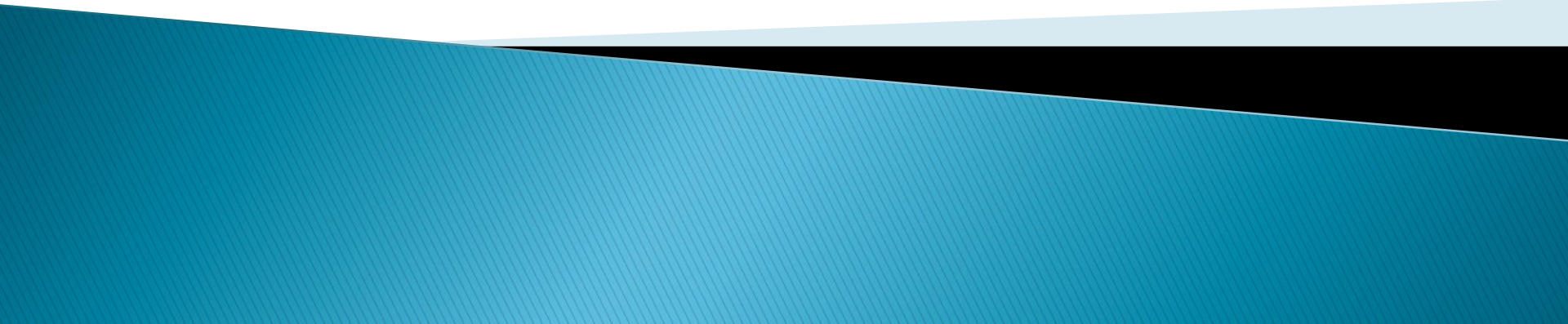
FRACTIONS

Fraction

▶ <u>2</u> Numerator (dividend)

▶ 5 Denominator (divisor)

Proper vs. Improper Fraction

Proper Fraction – as it suggests, it is proper since the numerator does not exceed the denominator.

½ , ¾ , 5/8

3/6, 6/8, 10/16

Improper fraction– numerator is greater than the denominator.

9/4,   5/3 ⟶ mixed number

(quotient   remainder/divisor)

e.g   Convert 9/4 to mixed number.

9 divide by 4 gives a quotient of 2. The remainder is 1. Go back to the divisor 4.

So 9/4= 2 ¼

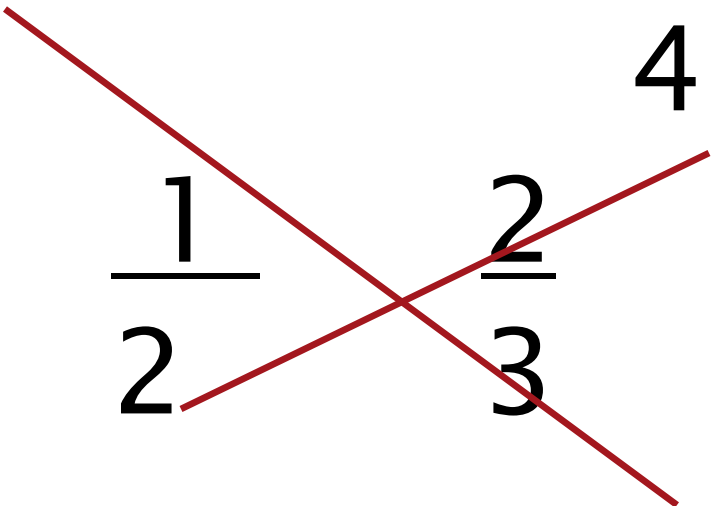To change Mixed to Improper (MI) just Multiply Add (MI   MA) $\longrightarrow$

2 ¼ = 4 times 2 plus 1 =9/4

Finding which is greater fraction

Which is greater ½ or 2/3?

CROSS MULTIPLY METHOD

$$\frac{1}{2} \qquad \frac{2}{3}$$

Finding which is greater fraction

Which is greater ½ or 2/3?

CROSS MULTIPLY METHOD

$$3$$

$$4$$

$$\frac{1}{2} \qquad \frac{2}{3}$$

Operations on Fraction

Addition and Subtraction

Denominators are critical / should be the same

$\frac{1}{2} + \frac{3}{4}$ (LCD of 4)

after LCD (divide–multiply to get equiv fraction)

$2/4 + \frac{3}{4} = 5/4$ or $1 \frac{1}{4}$
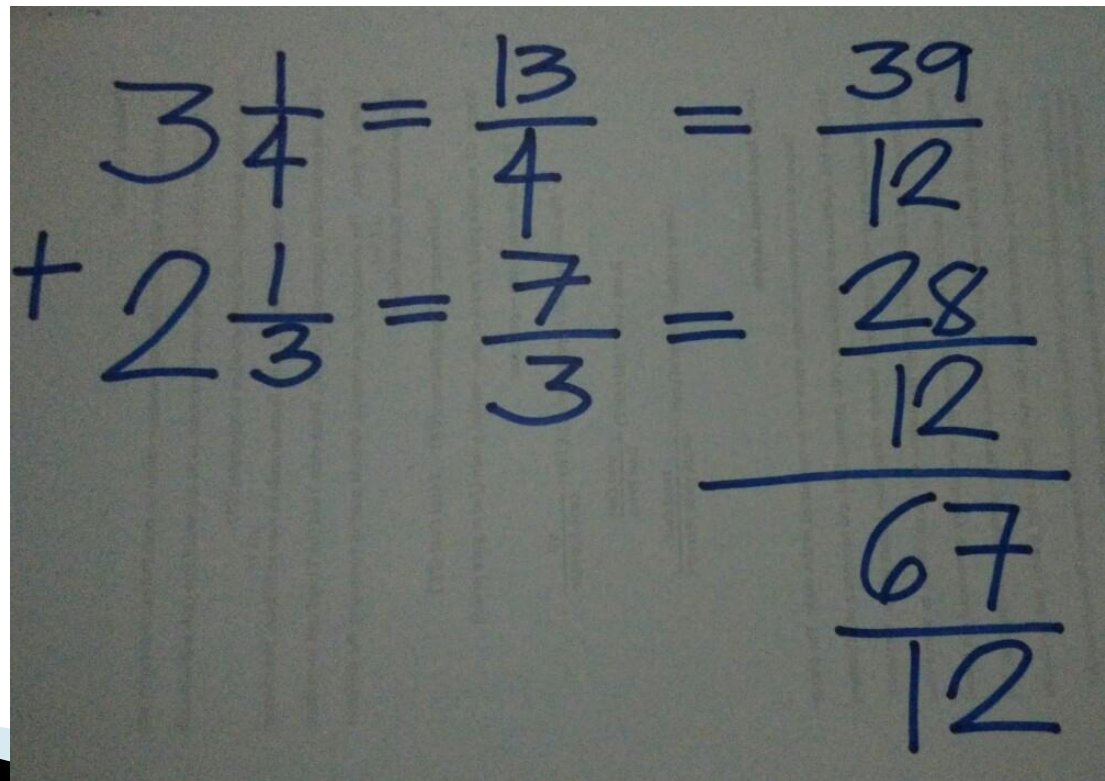
Improper/mixed number addition/subtraction

3 ¼ + 2 1/3

Could be done using the given mixed number or changing it to improper (MI–MA).

3 ¼ =13/2

2 1/3=7/3

$$3\frac{1}{4} = \frac{13}{4} = \frac{39}{12}$$
$$+2\frac{1}{3} = \frac{7}{3} = \frac{28}{12}$$
$$\frac{67}{12}$$

MULTIPLICATION

- Numerator by numerator
- Denominator by denominator

- $\dfrac{2}{3}$ x $\dfrac{5}{6}$ = $\dfrac{10}{18}$ or $\dfrac{5}{9}$

DIVISION

- Find the reciprocal of the divisor and proceed to multiplication.

- $\frac{1}{2} \div \frac{3}{4} = 1/2 \times 4/3 = 4/5$