

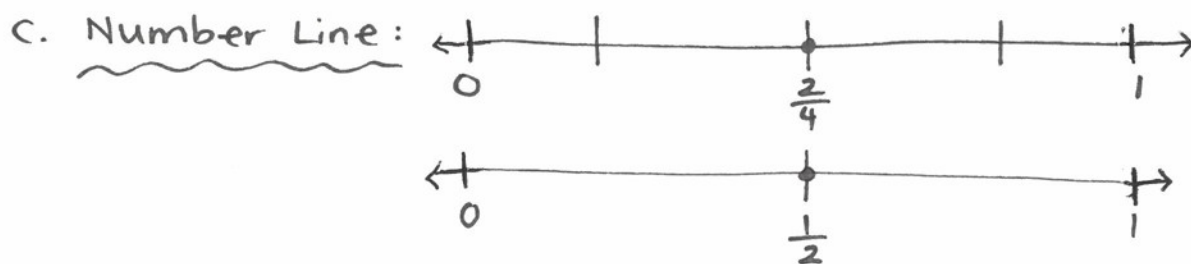


# Study Guide - Equivalent Fractions (Gr. 4)

## ① Equivalent Fractions (Student Booklet p. 5-22)

a. Pictorially:  =   
 $\frac{1}{2} = \frac{2}{4}$

b. Symbolically:  $\frac{1}{2} \xrightarrow{\times 2} \frac{2}{4}$      $\frac{1}{2} \xrightarrow{\times 3} \frac{3}{6}$      $\frac{1}{2} = \frac{2}{4} = \frac{3}{6}$



## ② Equivalent Fractions in Simplest Form (p. 23-32)

Step 1: Find factors for the numerator and denominator

Step 2: Identify the Greatest Common Factor (GCF)

Step 3: Divide the numerator and denominator by the GCF

numerator  $\rightarrow \frac{9}{15} \div 3 = \frac{3}{5}$   
denominator  $\rightarrow \frac{9}{15} \div 3 = \frac{3}{5}$

$9 = (1, 3, 9)$   
 $15 = (1, 3, 5, 15)$

GCF = 3

## ③ Compare and Order Fractions (p. 33-39)

a.  $\frac{2}{7}, \frac{5}{7}, \frac{7}{7}$  (least to greatest)

When fractions have like denominators, the fraction with the larger numerator is the larger fraction.

b.  $\frac{3}{8}, \frac{3}{5}, \frac{3}{4}$  (least to greatest)

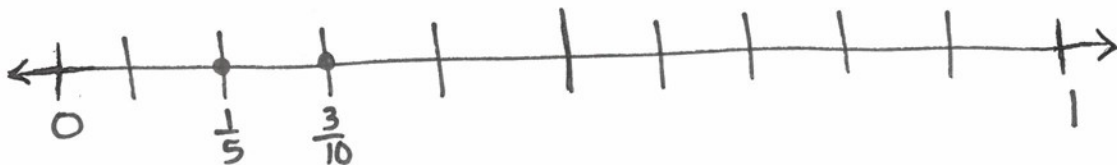
When fractions have like numerators the fraction with the smaller denominator is the larger fraction. The whole is divided into less parts.

c. Comparing Fractions using  $<, >, =$

$$\frac{3}{10} \boxed{>} \frac{1 \times 2}{5 \times 2} = \frac{2}{10}$$

$$\frac{1}{2} \boxed{=} \frac{4 \div 4}{8 \div 4} = \frac{1}{2}$$

d. Comparing and Ordering Fractions on a Number Line



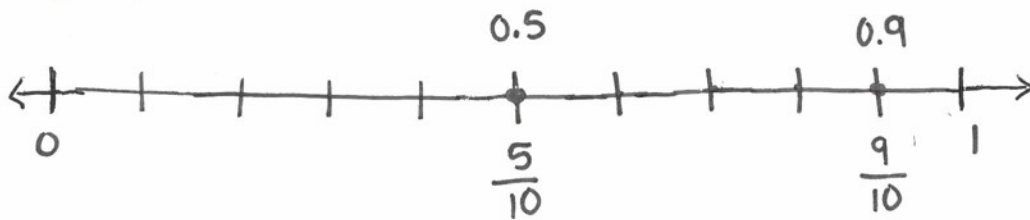
④ Expressing Fractions as Decimal Numbers (p. 40-46)

$$\frac{4}{10} = 0.4$$

$$\frac{4}{100} = 0.04$$

$$\frac{40}{100} = 0.40$$

⑤ Placing Fractions and Decimals on a Number Line (p. 47-50)



⑥ Percentages (p. 51-57)

$$\frac{89}{100} = 0.89 = 89\%$$

$$\frac{4}{20} \times 5 = \frac{20}{100} = 0.20 = 20\%$$