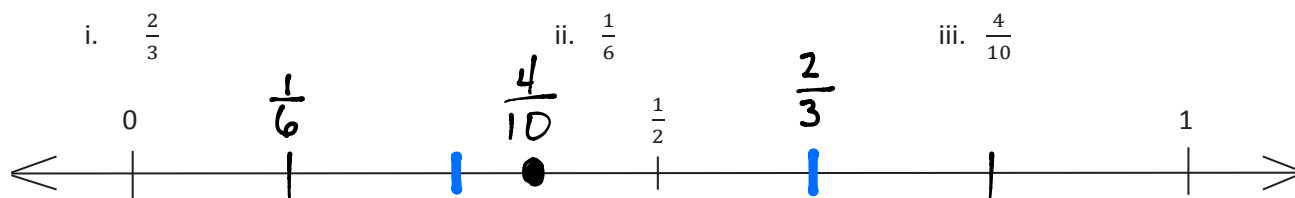


Name _____

Date _____

1.

- a. Plot the following points on the number line without measuring.



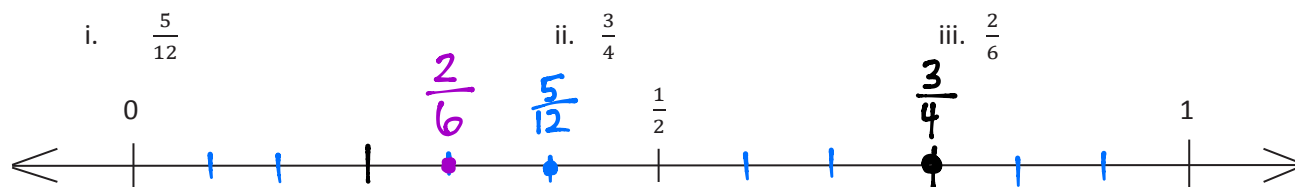
- b. Use the number line in Part (a) to compare the fractions by writing
- $>$
- ,
- $<$
- , or
- $=$
- on the lines.

i. $\frac{2}{3} > \frac{1}{2}$

ii. $\frac{4}{10} > \frac{1}{6}$

2.

- a. Plot the following points on the number line without measuring.



- b. Select two fractions from Part (a), and use the given number line to compare them by writing
- $>$
- ,
- $<$
- , or
- $=$
- .

$$\frac{5}{12} < \frac{3}{4}$$

 \leftarrow Answers will vary.

- c. Explain how you plotted the points in Part (a).

Decomposing each half into 2 parts helped me find $\frac{3}{4}$. Cutting each fourth into 3 parts helped me locate $\frac{5}{12}$. Two twelfths equals one sixth, so $\frac{4}{12} = \frac{2}{6}$... this helped me to locate $\frac{2}{6}$ at $\frac{4}{12}$.

3. Compare the fractions given below by writing $>$ or $<$ on the lines.

Give a brief explanation for each answer referring to the benchmark of 0 , $\frac{1}{2}$, and 1 .

a. $\frac{1}{2}$ $>$ $\frac{1}{4}$
 $\frac{1}{4}$ is less than $\frac{1}{2}$

b. $\frac{6}{8}$ $>$ $\frac{1}{2}$
 $\frac{6}{8}$ is greater than $\frac{4}{8}$, which is $\frac{1}{2}$.

c. $\frac{3}{4}$ $>$ $\frac{3}{5}$

Fourths are bigger than fifths, so $\frac{3}{4}$ is greater than $\frac{3}{5}$.

d. $\frac{4}{6}$ $<$ $\frac{9}{12}$

$\frac{9}{12}$ is midway between $\frac{1}{2}$ and 1 .
 $\frac{4}{6}$ is closer to $\frac{1}{2}$ than 1 .

e. $\frac{2}{3}$ $>$ $\frac{1}{4}$

$\frac{2}{3}$ is greater than $\frac{1}{2}$
 $\frac{1}{4}$ is less than $\frac{1}{2}$

f. $\frac{4}{5}$ $>$ $\frac{8}{12}$

$\frac{4}{5}$ is closer to 1
 $\frac{8}{12}$ is closer to $\frac{1}{2}$.

g. $\frac{1}{3}$ $<$ $\frac{3}{6}$

$\frac{1}{3}$ is less than $\frac{1}{2}$
 $\frac{3}{6}$ is equal to $\frac{1}{2}$

h. $\frac{7}{8}$ $>$ $\frac{3}{5}$

$\frac{7}{8}$ is closer to 1
 $\frac{3}{5}$ is closer to $\frac{1}{2}$.

i. $\frac{51}{100}$ $>$ $\frac{5}{10}$

$\frac{51}{100}$ is greater than $\frac{1}{2}$
 $\frac{5}{10}$ is equal to $\frac{1}{2}$

j. $\frac{8}{14}$ $>$ $\frac{49}{100}$

$\frac{8}{14}$ is greater than $\frac{1}{2}$
 $\frac{49}{100}$ is less than $\frac{1}{2}$.