

1.

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

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

ii.  $\frac{5}{6}$

iii.  $\frac{7}{12}$



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

i.  $\frac{7}{12} \quad > \quad \frac{1}{2}$

ii.  $\frac{7}{12} \quad < \quad \frac{5}{6}$

2.

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

i.  $\frac{11}{12}$

ii.  $\frac{2}{4}$

iii.  $\frac{3}{8}$



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

$$\frac{3}{8} < \frac{11}{12}$$

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

I decomposed  $\frac{1}{2}$  into 2 parts to find  $\frac{1}{4}$ . I decomposed a fourth into 2 parts to find  $\frac{3}{8}$ . Decomposing a fourth into 3 parts helped me find  $\frac{11}{12}$ .

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

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

a.  $\frac{1}{2} \underline{\quad} \frac{3}{4}$

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

b.  $\frac{1}{2} \underline{\quad} \frac{7}{8}$

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

c.  $\frac{2}{3} \underline{\quad} \frac{2}{5}$

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

$\frac{2}{5}$  is less than  $\frac{1}{2}$

d.  $\frac{9}{10} \underline{\quad} \frac{3}{5}$

$\frac{9}{10}$  is close to 1

$\frac{3}{5}$  is close to  $\frac{1}{2}$

e.  $\frac{2}{3} \underline{\quad} \frac{7}{8}$

$\frac{2}{3}$  is  $\frac{1}{3}$  away from 1

$\frac{7}{8}$  is  $\frac{1}{8}$  away from 1

f.  $\frac{1}{3} \underline{\quad} \frac{2}{4}$

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

$\frac{2}{4}$  is equal to  $\frac{1}{2}$

g.  $\frac{2}{3} \underline{\quad} \frac{5}{10}$

$\frac{2}{3}$  is more than  $\frac{1}{2}$

$\frac{5}{10}$  is equal to  $\frac{1}{2}$

h.  $\frac{11}{12} \underline{\quad} \frac{2}{5}$

$\frac{11}{12}$  is closer to 1

i.  $\frac{49}{100} \underline{\quad} \frac{51}{100}$

$\frac{49}{100}$  is less than  $\frac{1}{2}$

$\frac{51}{100}$  is more than  $\frac{1}{2}$

j.  $\frac{7}{16} \underline{\quad} \frac{51}{100}$

$\frac{7}{16}$  is less than  $\frac{1}{2}$

$\frac{51}{100}$  is more than  $\frac{1}{2}$