G4-M5-Lesson 13

1. Place the following fractions on the number line given.
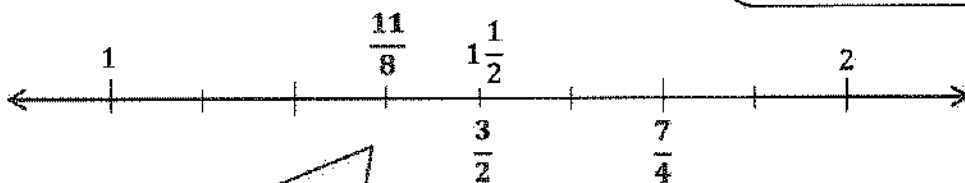
$\dfrac{8}{4}$ is equal to 2. Therefore, $\dfrac{7}{4}$ is 1 fourth less than 2.

a. $\dfrac{7}{4}$　　b. $\dfrac{3}{2}$　　c. $\dfrac{11}{8}$

I can draw a number bond, breaking $\dfrac{11}{8}$ into $\dfrac{8}{8}$ and $\dfrac{3}{8}$.

$\dfrac{11}{8}$ is 3 eighths more than 1.

2. Use the number line in Problem 1 to compare the fractions by writing <, >, or = on the lines.

   a. $1\dfrac{3}{4}$ __>__ $1\dfrac{1}{2}$

   b. $1\dfrac{3}{8}$ __<__ $1\dfrac{3}{4}$

   Using the benchmark $\dfrac{1}{2}$, I compare the fractions. $1\dfrac{3}{8}$ is less than 1 and 1 half, while $1\dfrac{3}{4}$ is more than 1 and 1 half.

3. Use the number line in Problem 1 to explain the reasoning you used when determining whether $\dfrac{11}{8}$ or $\dfrac{7}{4}$ was greater.

   Sample Student Response:

   After I plotted $\dfrac{11}{8}$ and $\dfrac{7}{4}$, I noticed that $\dfrac{7}{4}$ was greater than $1\dfrac{1}{2}$, whereas $\dfrac{11}{8}$ is less than $1\dfrac{1}{2}$.

　　Lesson 13:　　Reason using benchmarks to compare two fractions on the number line.　　**EUREKA MATH**

4. Compare the fractions given below by writing < or > on the lines. Give a brief explanation for each answer referring to benchmarks.

a. $\dfrac{5}{4}$ ___>___ $\dfrac{9}{10}$

$\dfrac{5}{4}$ *is greater than* 1.

$\dfrac{9}{10}$ *is less than* 1.

b. $\dfrac{7}{12}$ ___<___ $\dfrac{7}{6}$

I use two different benchmarks to compare these fractions.

$\dfrac{7}{12}$ *is one twelfth greater than* $\dfrac{1}{2}$.

$\dfrac{7}{6}$ *is one sixth greater than* 1.

Lesson 13:   Reason using benchmarks to compare two fractions on the number line.