Comparing Fractions

Objectives: 4.NF.A.2

Compare two fractions using a variety of techniques.

Warm-up Problem: Use the numbers below to make the number 4 by combining them with appropriate mathematical symbols. You can rearrange them in any way you want, but be sure to use all 4 numbers.

1, 3, 5, 7

- Compare each pair of fractions by using a symbol "=", ">", or "<".
- $\frac{3}{8}$ $\frac{20}{33}$

 $\begin{array}{ccc} \cdot & \frac{1}{8} & & \frac{1}{10} \end{array}$

• $\frac{21}{22}$ $\frac{9}{10}$

 $\cdot \quad \frac{3}{7} \qquad \frac{5}{7}$

 $\frac{3}{11}$ $\frac{5}{13}$

 $\begin{array}{ccc}
 & 9 & 4 \\
\hline
 & 17 & 77
\end{array}$

• $\frac{5}{12}$ $\frac{11}{25}$

 $\begin{array}{ccc} \bullet & \frac{3}{5} & \frac{3}{8} \end{array}$

• $\frac{25}{6}$ $\frac{32}{7}$

 $\frac{5}{9}$ $\frac{5}{7}$

• $\frac{3}{4}$ $\frac{9}{12}$

• $\frac{8}{13}$ $\frac{9}{12}$

•
$$\frac{2}{17}$$
 $\frac{2}{7}$

$$\begin{array}{ccc} \bullet & \frac{7}{24} & \frac{5}{24} \end{array}$$

•
$$\frac{1}{3}$$
 $\frac{2}{7}$

•
$$\frac{2}{5}$$
 $\frac{5}{9}$

•
$$\frac{4}{5}$$
 $\frac{5}{6}$

•
$$\frac{5}{15}$$
 $\frac{24}{60}$

•
$$\frac{3}{4}$$
 $\frac{2}{5}$

•
$$\frac{100}{8}$$
 $\frac{66}{5}$

•
$$\frac{6}{12}$$
 $\frac{13}{26}$

•
$$\frac{7}{10}$$
 $\frac{21}{32}$

$$\frac{8}{13}$$
 $\frac{8}{15}$

•
$$\frac{101}{20}$$
 $\frac{523}{200}$

Challenge Problem: Put the following numbers in increasing order from least to greatest:

$$\frac{3}{5}, \frac{1}{2}, \frac{6}{11}, \frac{5}{9}, \frac{4}{7}$$