Compare and Order Fractions and Mixed Numbers

**Compare and order** $1\frac{1}{3}$, $1\frac{3}{6}$, $\frac{7}{6}$.

**Way 1** Use number lines and compare.

[Number lines are shown with fractions $1\frac{1}{3}$, $1\frac{3}{6}$, and $\frac{7}{6}$ marked.]  
- $\frac{7}{6}$ is farthest to the left.  
- $1\frac{3}{6}$ is farthest to the right.  
- $1\frac{1}{3}$ is in the middle.  
So, $\frac{7}{6} < 1\frac{1}{3} < 1\frac{3}{6}$.

**Way 2** Use equivalent fractions.  
Change the mixed numbers to improper fractions. Then write the fractions using the same denominator.  
$$1\frac{1}{3} = \frac{4}{3} = \frac{8}{6}$$  
$$1\frac{3}{6} = \frac{9}{6} = \frac{7}{6}$$  
Compare the improper fractions.  
$$\frac{7}{6} < \frac{8}{6} < \frac{9}{6}$$  
**Solution:** $\frac{7}{6} < 1\frac{1}{3} < 1\frac{3}{6}$

Order the numbers from greatest to least. Use number lines to help you if needed.

1. $2\frac{3}{7}$, $\frac{18}{7}$, $2\frac{5}{7}$
2. $4\frac{2}{3}$, $\frac{39}{9}$, $4\frac{5}{9}$
3. $\frac{7}{4}$, $\frac{10}{20}$, $\frac{65}{10}$
4. $1\frac{1}{6}$, $\frac{12}{6}$, $\frac{9}{6}$
5. $9\frac{3}{5}$, $\frac{8}{10}$, $\frac{46}{5}$

Lynn was comparing $\frac{43}{6}$ to $\frac{50}{12}$ and decided $\frac{50}{12}$ was greater because 50 is greater than 43. Is her reasoning correct? Explain.