## Greater Number of Larger Pieces: A Strategy to Promote Prospective Teachers' Fraction Number Sense Development

## Task Version \#1

Directions: For each set of fractions below, circle the fraction that is greater, or if the fractions are equivalent, write "=" in between them. For each comparison, give an explanation, other than converting to common denominators, for why the circled fraction is greater or why the fractions are equivalent. Calculators may not be used on this task.

| 1) | $\frac{1}{2}$ | $\frac{17}{31}$ |  |
| :--- | :---: | :---: | :---: |
| 2) | $\frac{2}{17}$ | $\frac{2}{19}$ |  |
| 3) | $\frac{4}{7}$ | $\frac{9}{14}$ |  |
| 4) | $\frac{3}{7}$ | $\frac{6}{11}$ |  |
| 5) | $\frac{8}{9}$ | $\frac{12}{13}$ |  |
| 6) | $\frac{13}{15}$ | $\frac{17}{19}$ |  |
| 7) | $\frac{5}{6}$ | $\frac{6}{5}$ |  |
| 8) | $\frac{7}{10}$ | $\frac{8}{9}$ |  |
| 9) | $\frac{1}{4}$ | $\frac{25}{99}$ |  |
| $\mathbf{1 0 )}$ | $\frac{24}{7}$ |  |  |

## Greater Number of Larger Pieces: A Strategy to Promote Prospective Teachers' Fraction Number Sense Development

## Task Version \#2

Directions: For each set of fractions below, circle the fraction that is greater (or if the fractions are equivalent, write "=" in between them), and provide a "sense-making" explanation for how you know. You may use pictures if that is helpful to you, but your explanation cannot rely solely on a picture.
Calculators may not be used. Feel free to work on these problems in any order that makes sense to you. If you find yourself struggling with any of the problems, skip them and revisit them later.

| 1) | $\frac{1}{2}$ |  |  |
| :---: | :---: | :---: | :---: |
| 2) | $\frac{2}{17}$ | $\frac{2}{19}$ |  |
| 3) | $\frac{4}{7}$ | $\frac{9}{14}$ |  |
| 4) | $\frac{3}{7}$ | $\frac{6}{11}$ |  |
| 5) | $\frac{8}{9}$ | $\frac{12}{13}$ |  |
| 6) | $\frac{13}{15}$ | $\frac{17}{19}$ |  |
| 7) | $\frac{15}{17}$ | $\frac{19}{18}$ |  |
| 8) | $\frac{7}{10}$ | $\frac{8}{9}$ |  |
| 9) | $\frac{1}{4}$ | $\frac{25}{99}$ |  |
| 10) | $\frac{24}{7}$ | $\frac{34}{15}$ |  |
| 11) | $\frac{2}{7}$ | $\frac{3}{8}$ |  |
| 12) | $\frac{25}{12}$ | $\frac{31}{15}$ |  |
| 13) | $\frac{11}{20}$ | $\frac{19}{36}$ |  |
| 14) | $\frac{2}{9}$ | $\frac{3}{8}$ |  |
| 15) | $\frac{18}{25}$ | $\frac{16}{27}$ |  |

