

Which of these can I reach?  $\frac{1}{2}, \frac{1}{7}, \frac{2}{7}, \frac{5}{9}, \frac{11}{13}, \frac{17}{16}, \frac{19}{8}, \frac{2}{1}$

What is the biggest / smallest fraction you can make?

What is the biggest/smallest numerator?

Is it true that the numerators never decrease?

Can I make a fraction for which the numerator  
and denominator have a common factor?

Can I make a closed loop of fractions: a sequence of  
transformations ending back where I started?

Can you make sense of the process of working  
backwards from different fractions?

Show that every rational number  
between 0 and 1 is in F

