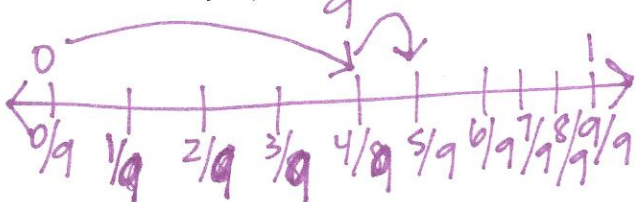


Name \_\_\_\_\_

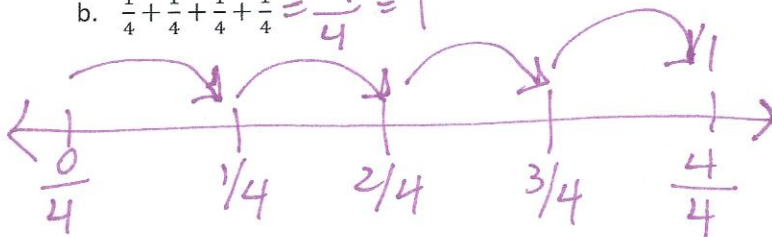
Date \_\_\_\_\_

1. Show each expression on a number line. Solve.

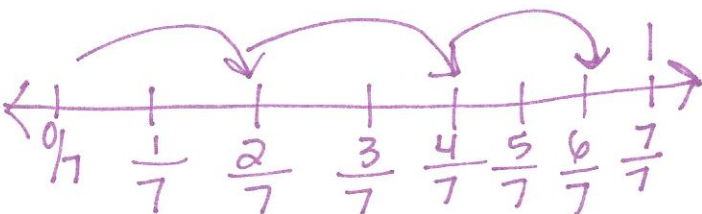
a.  $\frac{4}{9} + \frac{1}{9} = \frac{5}{9}$



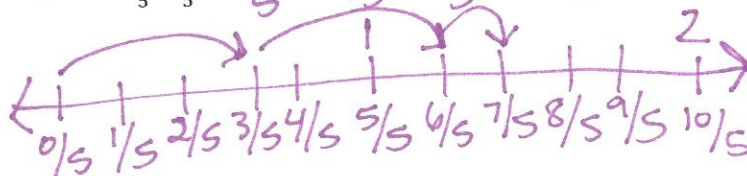
b.  $\frac{1}{4} + \frac{1}{4} + \frac{1}{4} + \frac{1}{4} = \frac{4}{4} = 1$



c.  $\frac{2}{7} + \frac{2}{7} + \frac{2}{7} = \frac{6}{7}$

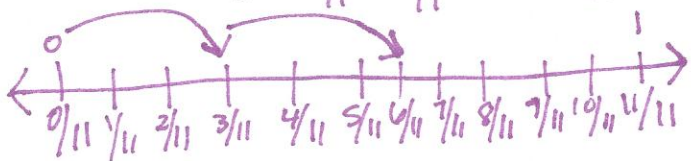


d.  $2 \times \frac{3}{5} + \frac{1}{5} = \frac{7}{5} = \frac{5}{5} + \frac{2}{5} = 1\frac{2}{5}$



2. Express each fraction as the sum of two or three equal fractional parts. Rewrite each as a multiplication equation. Show Part (a) on a number line.

a.  $\frac{6}{11} = \frac{3}{11} + \frac{3}{11} = 2 \times \frac{3}{11}$



b.  $\frac{9}{4} = \frac{3}{4} + \frac{3}{4} + \frac{3}{4} = 3 \times \frac{3}{4}$

c.  $\frac{12}{8} = \frac{4}{8} + \frac{4}{8} + \frac{4}{8} = 3 \times \frac{4}{8}$

d.  $\frac{27}{10} = \frac{9}{10} + \frac{9}{10} + \frac{9}{10} = 3 \times \frac{9}{10}$

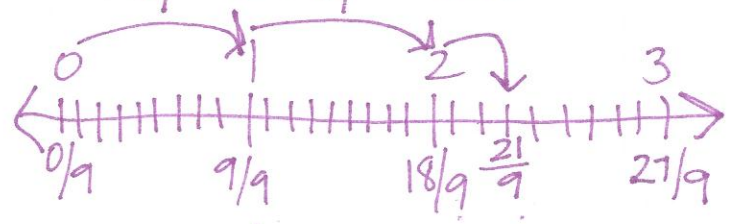
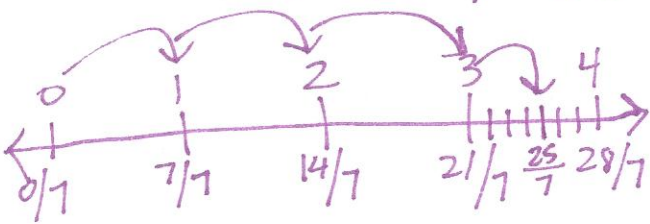
3. Express each of the following as the sum of a whole number and a fraction. Show Parts (c) and (d) on number lines.

a.  $\frac{9}{5} = \frac{5}{5} + \frac{4}{5} = 1\frac{4}{5}$

b.  $\frac{7}{2} = 3 \times \frac{2}{2} + \frac{1}{2} = 3\frac{1}{2}$

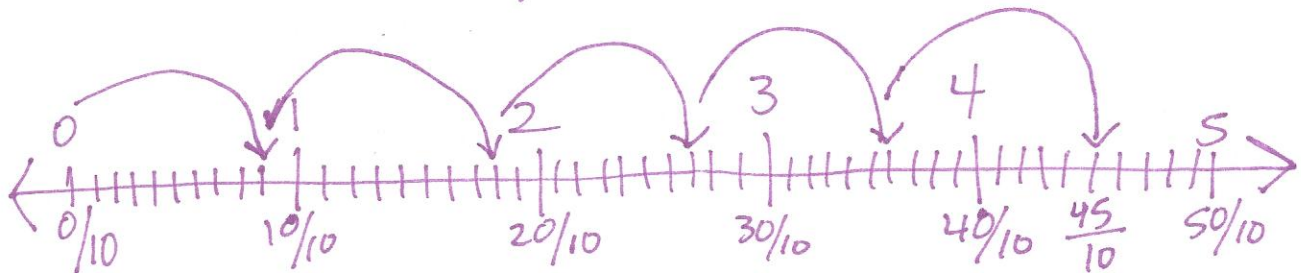
c.  $\frac{25}{7} = 3 \times \frac{7}{7} + \frac{4}{7} = 3\frac{4}{7}$

d.  $\frac{21}{9} = 2 \times \frac{9}{9} + \frac{3}{9} = 2\frac{3}{9}$



4. Natalie sawed five boards of equal length to make a stool. Each was 9 tenths of a meter long. What is the total length of the boards she sawed? Express your answer as the sum of a whole number and the remaining fractional units. Draw a number line to represent the problem.

$$5 \times \frac{9}{10} = \frac{45}{10} = \frac{40}{10} + \frac{5}{10} = 4\frac{5}{10}$$



The total length of Natalie's boards is  $4\frac{5}{10}$  meters long.