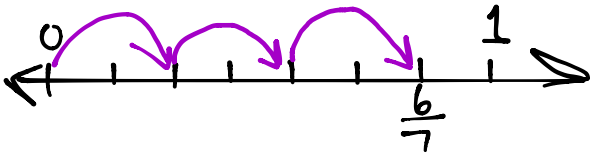
Name _____ Date _____

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

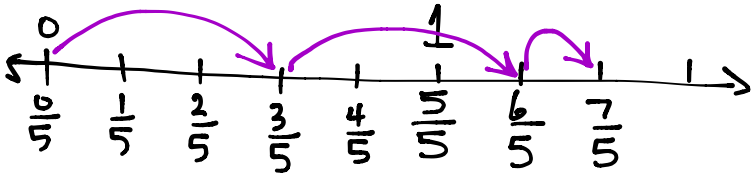
a) $\frac{4}{9}+\frac{1}{9}$

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

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

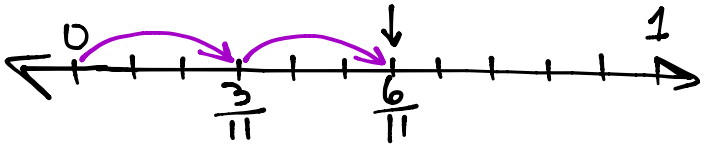


d) $2 \times \frac{3}{5}+\frac{1}{5} = \frac{7}{5} = \frac{5}{5}+\frac{2}{5} = 1\frac{2}{5}$

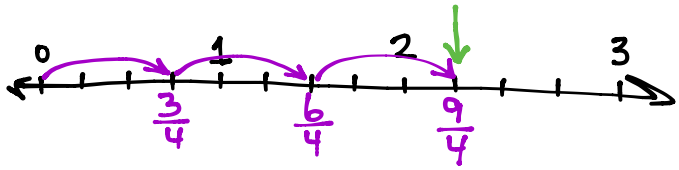


2) Express each fraction as the sum of two or three equal fractional parts. Rewrite each as a multiplication equation. Show letter a on a number line.

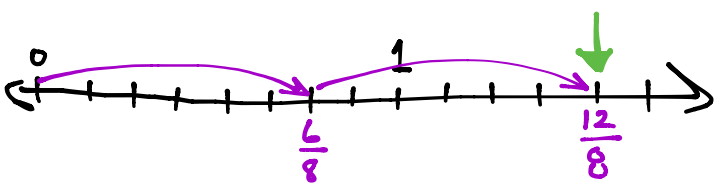
a) $\frac{6}{11} = \frac{3}{11}+\frac{3}{11} = 2 \times \frac{3}{11}$



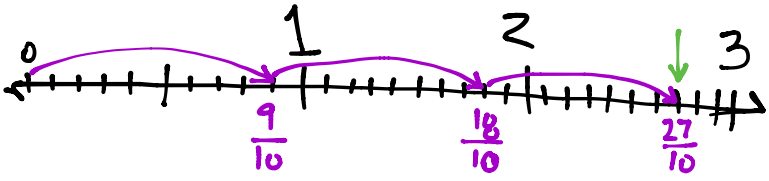
b) $\frac{9}{4} = \frac{3}{4}+\frac{3}{4}+\frac{3}{4} = 3 \times \frac{3}{4}$



c) $\frac{12}{8} = \frac{6}{8}+\frac{6}{8} = 2 \times \frac{6}{8}$



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



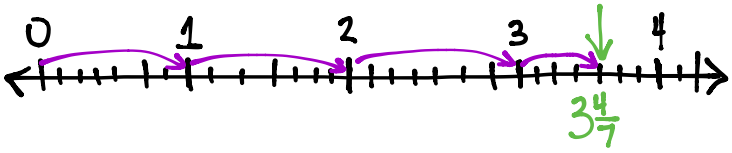
3) Express each of the following as the sum of a whole number and a fraction. Show c) and d) on number lines.

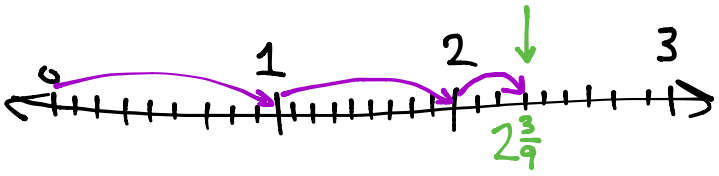
a) $\frac{9}{5} = \frac{5}{5} + \frac{4}{5} = 1 + \frac{4}{5}$

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

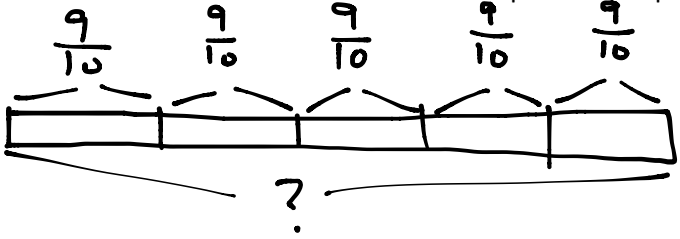
c) $\frac{25}{7} = \frac{7}{7} + \frac{7}{7} + \frac{7}{7} + \frac{4}{7}$
$= 3 + \frac{4}{7}$

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





4) Natalie sawed five boards of equal length to make a stool. Each was 9 tenths of a meter long. How many meters of board did she saw? Express your answer as the sum of a whole number and the remaining fractional units. Draw a number line to represent the problem.



$\frac{9}{10} + \frac{9}{10} + \frac{9}{10} + \frac{9}{10} + \frac{9}{10} = \frac{45}{10}$

$= \frac{10}{10} + \frac{10}{10} + \frac{10}{10} + \frac{10}{10} + \frac{5}{10}$

$= 4 + \frac{5}{10}$