


D. Fractions and mixed numbers on the number line

20. The set of all fractions - the number line

1. On the right of the page you can see a straight line. 

 - a. Draw on it an arrowhead, and mark on it the number 0.
 - b. Copy onto the line a unit segment from one of the rulers.
 - c. Copy onto the line as many **whole numbers** as you can.
 - d. Choose an appropriate ruler and mark on the line the following fractions :
 $\frac{1}{2}$, $\frac{3}{2}$, $\frac{5}{2}$.
 - e. Choose an appropriate ruler and mark on the same line the fractions :
 $\frac{1}{3}$, $\frac{4}{3}$, $\frac{8}{3}$.
 - g. Mark on the same line the following fractions (choose an appropriate ruler for each fraction) :
 $\frac{1}{5}$, $\frac{6}{5}$, $\frac{7}{10}$, $\frac{29}{10}$, $\frac{9}{16}$, $\frac{24}{12}$.

- A straight line that has a point of origin, a unit segment marked on it, and a direction (an arrowhead) is called a number line.
- On a number line, each segment between one whole number and the following whole number is a unit segment.
- On a number line, all unit segments have the same length.