Fractions on a number line

1. Draw an arrow to show the fractions on the number lines.

   a) \( \frac{1}{2} \)

   [Diagram of a number line with arrow from 0 to 1, marked at \( \frac{1}{2} \)]

   b) \( \frac{1}{3} \)

   [Diagram of a number line with arrow from 0 to 1, marked at \( \frac{1}{3} \)]

   c) \( \frac{1}{4} \)

   [Diagram of a number line with arrow from 0 to 1, marked at \( \frac{1}{4} \)]

   Are your answers accurate or are they estimates?

2. Write <, > or = to compare the fractions.

   a) \( \frac{1}{2} \) \( \bigcirc \) \( \frac{1}{4} \)

   b) \( \frac{1}{4} \) \( \bigcirc \) \( \frac{1}{3} \)

   c) \( \frac{1}{3} \) \( \bigcirc \) \( \frac{1}{2} \)

3. Write the missing fractions on the number lines.

   a) [Diagram of a number line with fractions \( 0 \), \( \frac{1}{2} \), \( 1 \), \( \frac{3}{2} \), \( 2 \), \( 3 \)]

   b) [Diagram of a number line with fractions \( 0 \), \( \frac{1}{3} \), \( 1 \), \( \frac{4}{3} \), \( 2 \)]

   c) [Diagram of a number line with fractions \( 0 \), \( \frac{1}{4} \), \( \frac{5}{4} \), \( \frac{8}{4} \), \( 2 \)]

   d) Write three fractions that are equivalent to one whole.

   Use the number lines to help you.

   [Blank space for three fractions]

   What do you notice?

   [Blank space for notes]

   Talk about it with a partner.
4 Draw an arrow to estimate where each fraction belongs on the number line.

a) \(\frac{3}{4}\)

b) 1 and \(\frac{2}{3}\)

5 Write each fraction under the correct heading.

\[
\begin{array}{cccc}
\frac{2}{3} & \frac{4}{4} & \frac{5}{3} & \frac{1}{8} \\
\frac{3}{4} & \frac{7}{4} & \frac{8}{8} & \frac{7}{8}
\end{array}
\]

<table>
<thead>
<tr>
<th>Less than one whole</th>
<th>Equal to one whole</th>
<th>More than one whole</th>
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6 What fraction is shown in each diagram?

Draw an arrow to show the fraction on the number line.

a)

b)

7 One eighth is greater than one quarter.

Do you agree with Teddy? \_\_\_\_\_\_\_\_\_

Use the number line to show why.