1. Convert the improper fractions to mixed numbers.
   a) \[ \frac{8}{5} = \square \]
   b) \[ \frac{5}{5} = \square \]
   c) \[ \frac{3}{5} = \square \]
   d) \[ \frac{11}{4} = \square \]

2. Shade the bar models to represent each improper fraction. Convert the improper fractions to mixed numbers.
   a) \[ \frac{7}{3} = \square \]
   b) \[ \frac{8}{3} = \square \]
   c) \[ \frac{9}{4} = \square \]
   d) \[ \frac{11}{4} = \square \]
3. Convert the improper fractions to mixed numbers.

a) \( \frac{10}{2} = \) 

b) \( \frac{10}{3} = \) 

c) \( \frac{10}{4} = \) 

d) \( \frac{10}{5} = \) 

e) \( \frac{12}{5} = \) 

f) \( \frac{13}{6} = \) 

g) \( \frac{13}{7} = \) 

h) \( \frac{31}{8} = \) 

4. Eva has 7 bottles of juice.

Each bottle contains half a litre of juice.

How many litres of juice does Eva have altogether?

Write your answer as a mixed number.

5. Dexter is converting improper fractions.

\( \frac{32}{3} = 3 \frac{1}{3} \)

Explain why Dexter is incorrect.

6. Find the value of

\( \frac{27}{3} = \) 

7. Find two possible values for \( \star \) and \( \blacktriangle \)

\( \frac{30}{\star} = \frac{\blacktriangle}{2} \)
Mixed numbers to improper fractions

1. Convert the mixed numbers to improper fractions.
   a)
   
   \[
   2 \frac{3}{4} = \frac{11}{4}
   \]
   
   ![Diagram showing 2 wholes and 3 parts of a fourth]

   b)
   
   \[
   2 \frac{3}{8} = \frac{19}{8}
   \]
   
   ![Diagram showing 2 wholes and 3 parts of an eighth]

   c)
   
   \[
   3 \frac{3}{8} = \frac{27}{8}
   \]
   
   ![Diagram showing 3 wholes and 3 parts of an eighth]

2. Convert the mixed numbers to improper fractions.
   Colour the bar models to help you.
   a)
   
   \[
   2 \frac{1}{4} = \frac{9}{4}
   \]
   
   ![Bar model showing 2 wholes and 1 part of a fourth]

   b)
   
   \[
   2 \frac{1}{3} = \frac{7}{3}
   \]
   
   ![Bar model showing 2 wholes and 1 part of a third]

   c)
   
   \[
   3 \frac{1}{3} = \frac{10}{3}
   \]
   
   ![Bar model showing 3 wholes and 1 part of a third]

   d)
   
   \[
   3 \frac{2}{5} = \frac{17}{5}
   \]
   
   ![Bar model showing 3 wholes and 2 parts of a fifth]
3 Convert the mixed numbers to improper fractions. Write the next conversion in each part.

a) \(2 \frac{1}{7} = \)

b) \(3 \frac{1}{5} = \)

\(4 \frac{1}{5} = \)

\(5 \frac{1}{5} = \)

= 

\(\)

= 

\(\)

\(\)

Talk to a partner about any patterns you spot.

4 Here are 4 whole pizzas and \(\frac{3}{5}\) of a pizza.

How many children can have \(\frac{1}{5}\) of a pizza?

5 Whitney is converting mixed numbers to improper fractions.

\[4 \frac{1}{7} = \frac{28}{7}\]

Do you agree with Whitney? ______________

Explain your answer.

6 The table shows some possible values of the circle. Use this to find the corresponding value of the triangle.

<table>
<thead>
<tr>
<th>Circle</th>
<th>Triangle</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>88</td>
</tr>
<tr>
<td>2</td>
<td>803</td>
</tr>
<tr>
<td>4</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td></td>
</tr>
</tbody>
</table>