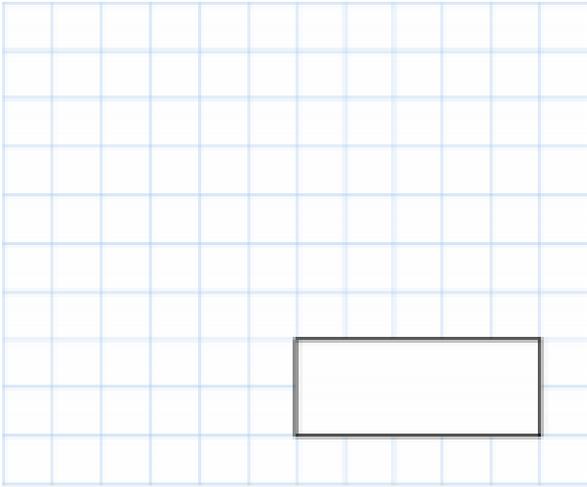
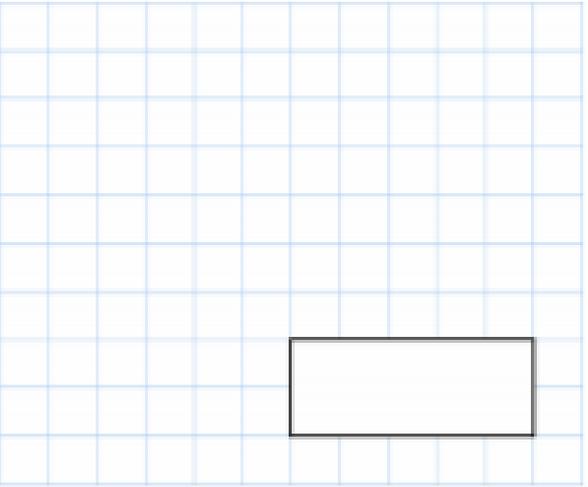
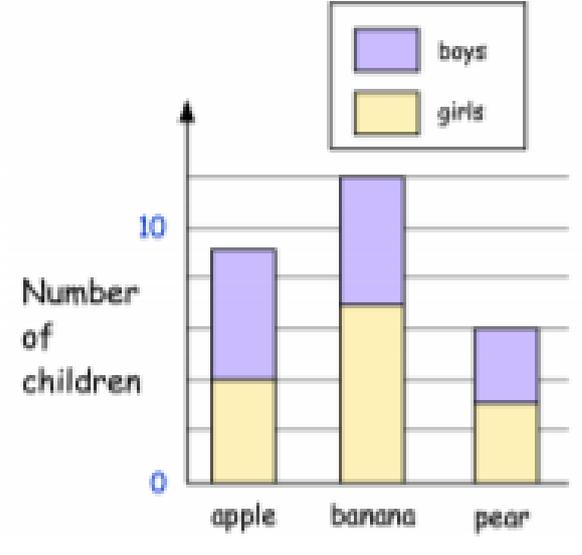
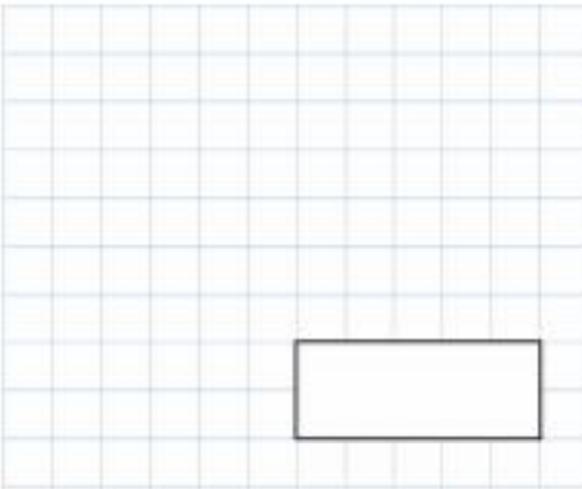
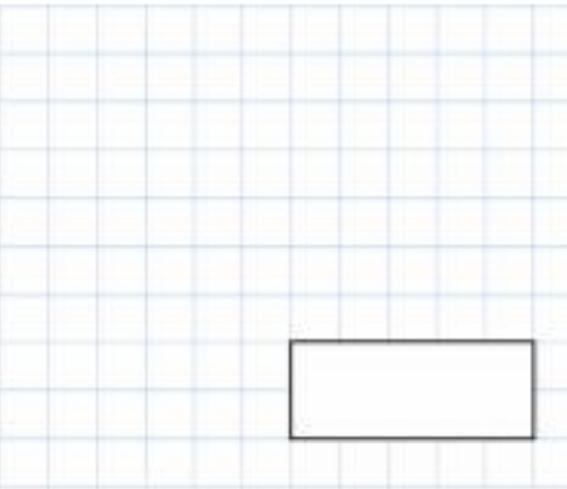
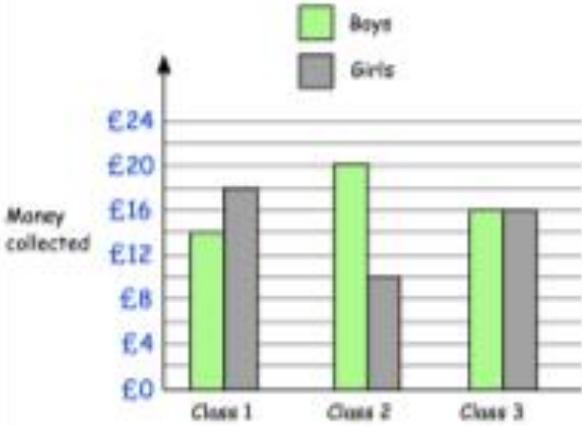


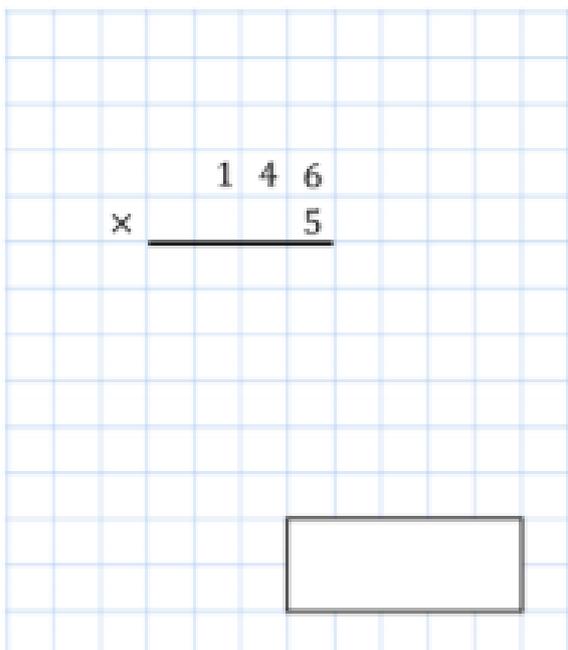
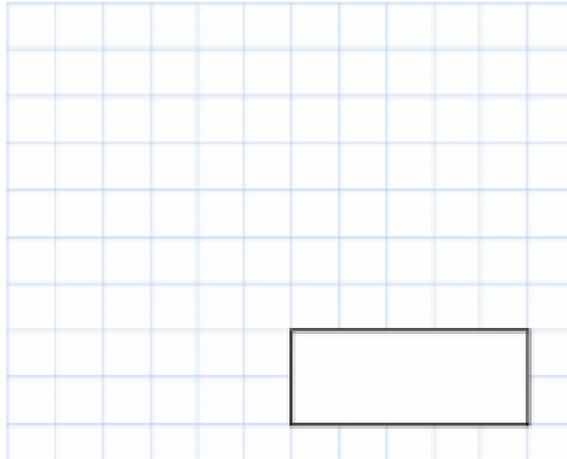
Monday-5 a day

<p>11×12</p> 	<p>$\frac{3}{4}$ of 24</p> 												
<p>Each child in a class is given one piece of fruit.</p>  <table border="1"> <caption>Number of children by fruit and gender</caption> <thead> <tr> <th>Fruit</th> <th>Boys</th> <th>Girls</th> </tr> </thead> <tbody> <tr> <td>apple</td> <td>5</td> <td>4</td> </tr> <tr> <td>banana</td> <td>6</td> <td>7</td> </tr> <tr> <td>pear</td> <td>3</td> <td>3</td> </tr> </tbody> </table>	Fruit	Boys	Girls	apple	5	4	banana	6	7	pear	3	3	<p>Which type of fruit was chosen by the same number of boys and girls?</p> <p>How many boys are in the class?</p>
Fruit	Boys	Girls											
apple	5	4											
banana	6	7											
pear	3	3											
<p>The numbers in this sequence increase by 4 each time.</p> <p>4 8 12 16</p> <p>The numbers in this sequence increase by 5 each time.</p> <p>5 10 15 20 ...</p>	<p>Write three numbers in both sequences</p>												

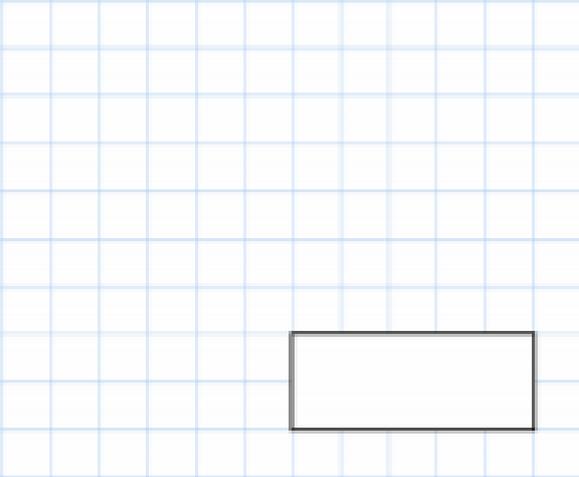
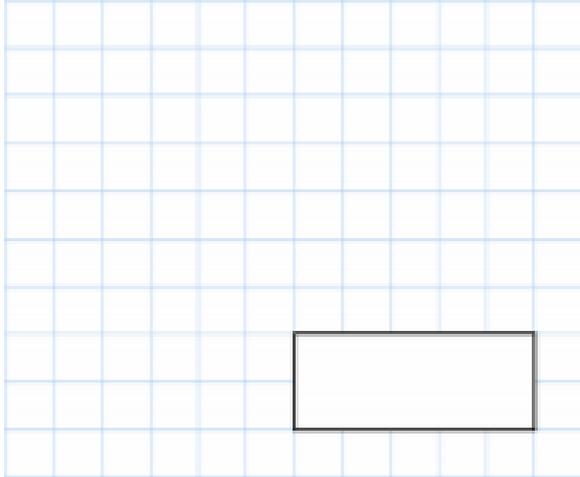
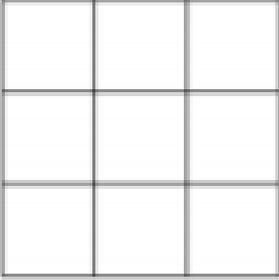
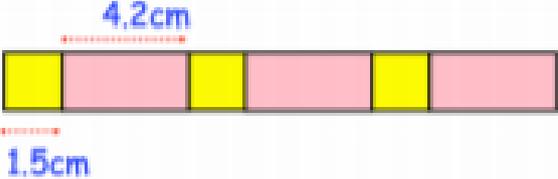
Tuesday- 5 a day

<p>$812 - 133$</p> 	<p>54×6</p> 												
<p>Three classes at a primary school collected some money.</p> <p>The chart shows how much money the boys and girls collected.</p>  <table border="1"> <caption>Money Collected by Class and Gender</caption> <thead> <tr> <th>Class</th> <th>Boys (£)</th> <th>Girls (£)</th> </tr> </thead> <tbody> <tr> <td>Class 1</td> <td>14</td> <td>18</td> </tr> <tr> <td>Class 2</td> <td>20</td> <td>10</td> </tr> <tr> <td>Class 3</td> <td>16</td> <td>16</td> </tr> </tbody> </table>	Class	Boys (£)	Girls (£)	Class 1	14	18	Class 2	20	10	Class 3	16	16	<p>In Class 2, how much more money did the boys collect than the girls?</p> <p>How much money did the girls collect altogether in classes 1, 2 and 3?</p>
Class	Boys (£)	Girls (£)											
Class 1	14	18											
Class 2	20	10											
Class 3	16	16											
<p>The numbers in this sequence increase by 30 each time.</p> <p>10 40 70 100 ...</p> <p>Which number in the sequence is closest to 300?</p>													

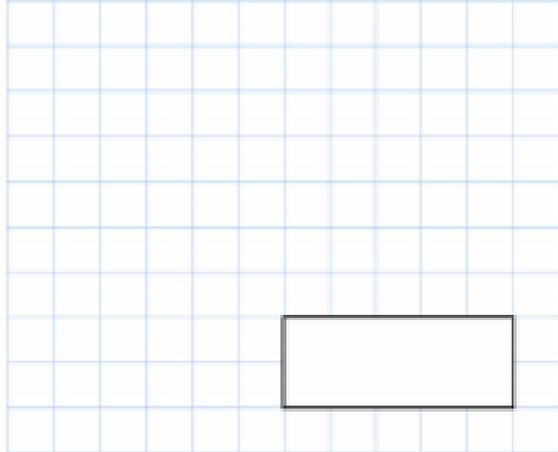
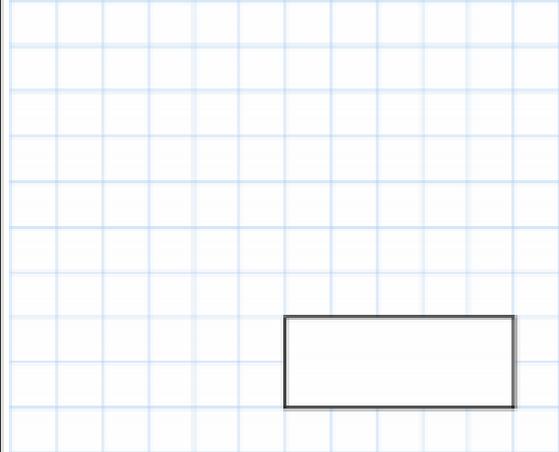
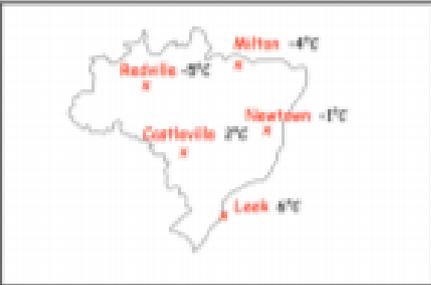
Wednesday- 5 a day

	$\square \times 3 = 215 + 109$ 								
<table border="1" data-bbox="223 958 598 1187"> <tbody> <tr> <td>Ben</td> <td></td> </tr> <tr> <td>Cons</td> <td></td> </tr> <tr> <td>Dylan</td> <td></td> </tr> <tr> <td>Elke</td> <td></td> </tr> </tbody> </table> <div data-bbox="438 1198 750 1254"> <p>Key  = £10</p> </div>	Ben		Cons		Dylan		Elke		<p>How much money does Ben have?</p>
Ben									
Cons									
Dylan									
Elke									
<p>I think of a number</p> <p>I add three to my number.</p> <p>Then I multiply by 4.</p> <p>The answer is 36.</p>	<p>What is my number?</p>								
<p>A bag holds red and white sweets.</p> <p>$\frac{3}{10}$ of the sweets are red.</p> <p>What fraction of the sweets are white?</p>									

Thursday- 5 a day

<p>5.1 – 1.3</p> 	<p>15 × 100</p> 
<p>Shade in $\frac{2}{3}$ of the shape</p>	
<p>This shape is made from three identical squares and three identical rectangles.</p> 	<p>Work out the perimeter of the shape</p>
<p>Place the correct sign, < or > between this pair of numbers</p> <p>2 <input type="text"/> 7</p>	

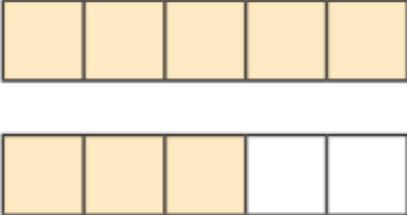
Friday- 5 a day

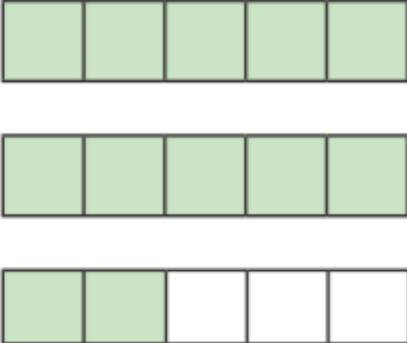
<p>$6,000 \div 100$</p> 	<p>$7 - 10$</p> 
<p>Holly is saving money. In January, she saves £15.15 In February, she saves £8.82 In March, Holly saves £13.37 Work out how much she has saved in total.</p>	
	<p>Arrange the towns in order of temperature, starting with the lowest.</p>
<p>Which town has a temperature closest to 0°C?</p>	

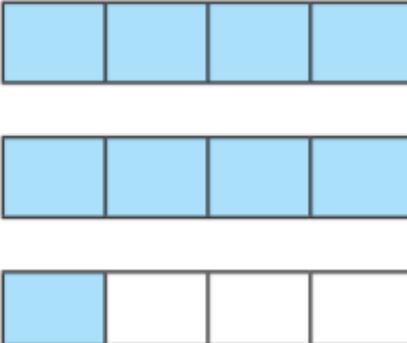
Task 2

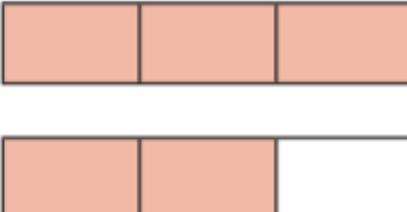
Improper Fractions to Mixed Numbers

1 Convert the improper fractions to mixed numbers.

a)  $\frac{8}{5} = \square$

b)  $\frac{\square}{5} = \square$

c)  $\frac{\square}{\square} = \square$

d)  $\frac{\square}{\square} = \square$

2

Shade the bar models to represent each improper fraction.
Convert the improper fractions to mixed numbers.



$$\frac{7}{3} = \square$$



$$\frac{8}{3} = \square$$



$$\frac{9}{4} = \square$$



$$\frac{11}{4} = \square$$

3

Convert the improper fractions to mixed numbers.

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

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

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

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

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

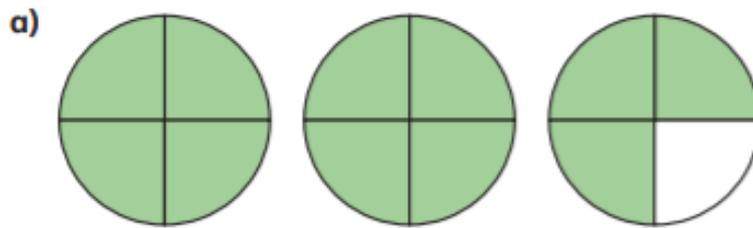
g) $\frac{13}{7} =$

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

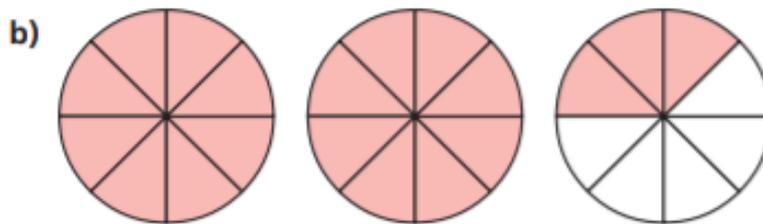
h) $\frac{31}{8} =$

Mixed Numbers to Improper Fractions

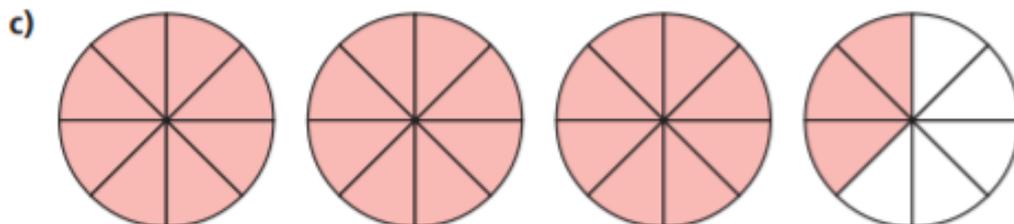
1 Convert the mixed numbers to improper fractions.



$$2\frac{3}{4} = \frac{\boxed{}}{4}$$



$$2\frac{3}{8} = \frac{\boxed{}}{8}$$

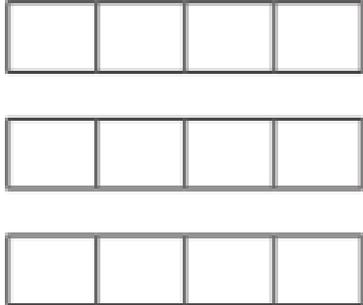


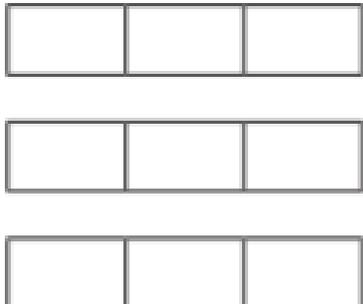
$$3\frac{3}{8} = \frac{\boxed{}}{8}$$

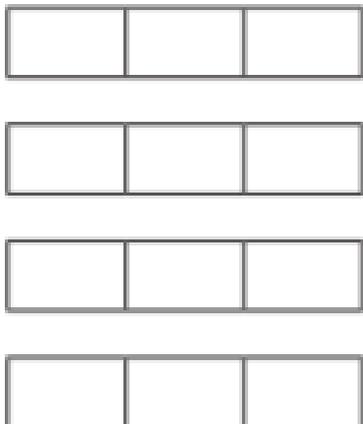
2

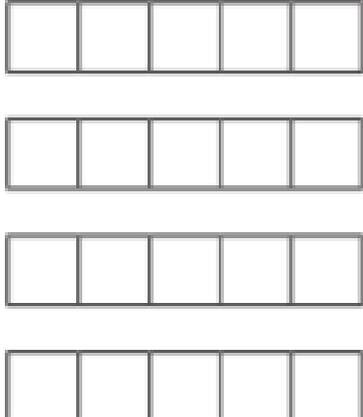
Convert the mixed numbers to improper fractions.

Colour the bar models to help you.

a)  $2\frac{1}{4} =$ 

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

c)  $3\frac{1}{3} =$ 

d)  $3\frac{2}{5} =$ 

3

Convert the mixed numbers to improper fractions.

Write the next conversion in each part.

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

$2\frac{2}{7} =$

$2\frac{3}{7} =$

=

c) $5\frac{1}{2} =$

$5\frac{1}{4} =$

$5\frac{1}{8} =$

=

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

$4\frac{1}{5} =$

$5\frac{1}{5} =$

=

Task 3

Eva has 7 bottles of juice.

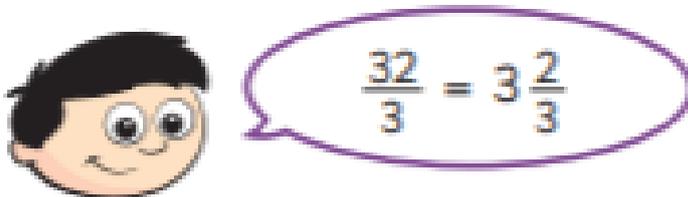
Each bottle contains half a litre of juice.



How many litres of juice does Eva have altogether?

Write your answer as a mixed number.

Dexter is converting improper fractions.



Explain why Dexter is incorrect.

Find two possible values for ★ and ▲

$$\frac{30}{★} = ▲ \frac{2}{★}$$

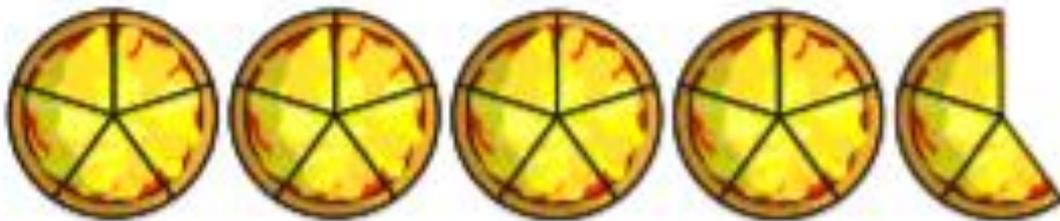
$★ = \square$

$▲ = \square$

$★ = \square$

$▲ = \square$

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



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

Whitney is converting mixed numbers to improper fractions.



Do you agree with Whitney? _____

Explain your answer.

$\frac{3}{5} = \frac{\triangle}{5}$

The table shows some possible values of the circle.

Use this to find the corresponding value of the triangle.

	
1	
2	
4	
8	
16	
	88
	803

Challenge

Fill in the missing numbers.

How many different possibilities can you find for each equation?

$$2 \frac{\square}{8} = \frac{\square}{8}$$

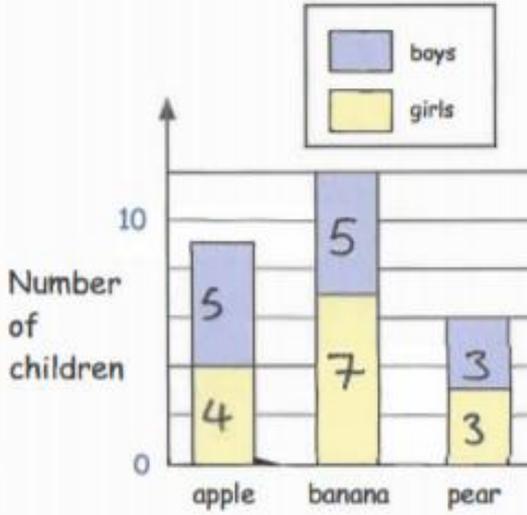
$$2 \frac{\square}{5} = \frac{\square}{5}$$

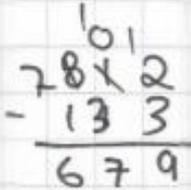
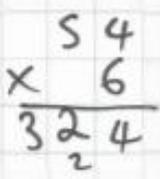
Compare the number of possibilities you found.

ANSWERS

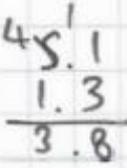
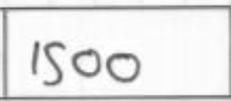
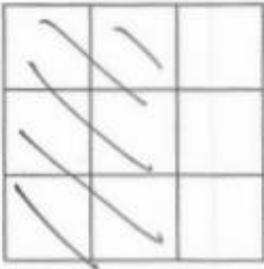
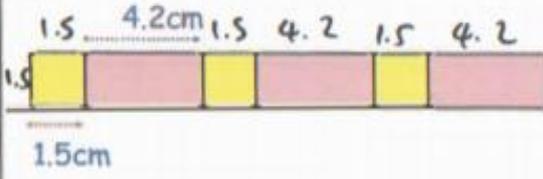
YEAR 5 MATHS HOME LEARNING – Week Beginning 15th June

Monday- 5 a day answers

<p>11×12</p> <p style="text-align: center; border: 1px solid black; padding: 5px; width: fit-content; margin: 0 auto;">132</p>	<p>$\frac{3}{4}$ of 24</p> <p style="text-align: center; border: 1px solid black; padding: 5px; width: fit-content; margin: 0 auto;">18</p>												
<p>Each child in a class is given one piece of fruit.</p>  <table border="1" style="margin-left: auto; margin-right: auto;"> <caption>Fruit Choice Data</caption> <thead> <tr> <th>Fruit</th> <th>Boys</th> <th>Girls</th> </tr> </thead> <tbody> <tr> <td>apple</td> <td>5</td> <td>4</td> </tr> <tr> <td>banana</td> <td>5</td> <td>7</td> </tr> <tr> <td>pear</td> <td>3</td> <td>3</td> </tr> </tbody> </table>	Fruit	Boys	Girls	apple	5	4	banana	5	7	pear	3	3	<p>Which type of fruit was chosen by the same number of boys and girls?</p> <p style="text-align: center; font-size: 1.5em;">Pear</p> <p>How many boys are in the class?</p> <p style="text-align: center; font-size: 1.5em;">$5 + 5 + 3 = 13$</p>
Fruit	Boys	Girls											
apple	5	4											
banana	5	7											
pear	3	3											
<p>The numbers in this sequence increase by 4 each time.</p> <p>4 8 12 16</p> <p>The numbers in this sequence increase by 5 each time.</p> <p>5 10 15 20 ...</p>	<p>Write three numbers in both sequences</p> <p style="text-align: center; font-size: 1.5em;">20, 40, 60</p>												

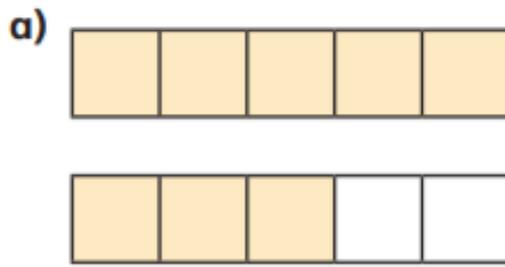
<p>812 – 133</p>  <p style="text-align: center; border: 1px solid black; padding: 5px; width: fit-content; margin: 0 auto;">679</p>	<p>54 × 6</p>  <p style="text-align: center; border: 1px solid black; padding: 5px; width: fit-content; margin: 0 auto;">324</p>												
<p>Three classes at a primary school collected some money.</p> <p>The chart shows how much money the boys and girls collected.</p>  <table border="1" style="margin-top: 10px;"> <caption>Money Collected by Class</caption> <thead> <tr> <th>Class</th> <th>Boys (£)</th> <th>Girls (£)</th> </tr> </thead> <tbody> <tr> <td>Class 1</td> <td>14</td> <td>18</td> </tr> <tr> <td>Class 2</td> <td>20</td> <td>10</td> </tr> <tr> <td>Class 3</td> <td>16</td> <td>16</td> </tr> </tbody> </table>	Class	Boys (£)	Girls (£)	Class 1	14	18	Class 2	20	10	Class 3	16	16	<p>In Class 2, how much more money did the boys collect than the girls?</p> <p style="text-align: center; font-size: 1.2em;">£10</p> <hr/> <p>How much money did the girls collect altogether in classes 1, 2 and 3?</p> <p style="text-align: center; font-size: 1.2em;">$18 + 10 + 16 = 44$</p>
Class	Boys (£)	Girls (£)											
Class 1	14	18											
Class 2	20	10											
Class 3	16	16											
<p>The numbers in this sequence increase by 30 each time.</p> <p style="text-align: center; font-size: 1.2em;">10 40 70 100 ...</p> <p>Which number in the sequence is closest to 300?</p>	<p style="text-align: center; font-size: 1.5em;">310</p>												

$ \begin{array}{r} 146 \\ \times 5 \\ \hline 730 \end{array} $ <div style="border: 1px solid black; width: 100px; height: 40px; margin: 20px auto; text-align: center; font-size: 24px;">730</div>	$ \square \times 3 = 215 + 109 $ $ \begin{array}{r} 215 \\ + 109 \\ \hline 324 \end{array} $ <div style="border: 1px solid black; width: 100px; height: 40px; margin: 20px auto; text-align: center; font-size: 24px;">108</div>								
<table border="1" style="width: 100%; border-collapse: collapse;"> <tbody> <tr> <td style="padding: 2px;">Ben</td> <td style="text-align: center;">○ ○ ○ ○ ◐</td> </tr> <tr> <td style="padding: 2px;">Cara</td> <td style="text-align: center;">○ ○</td> </tr> <tr> <td style="padding: 2px;">Dylan</td> <td style="text-align: center;">○ ○ ◐</td> </tr> <tr> <td style="padding: 2px;">Ellie</td> <td style="text-align: center;">○ ○ ○ ○ ○</td> </tr> </tbody> </table> <div style="border: 1px solid black; padding: 5px; margin-top: 10px; display: flex; align-items: center;"> Key ○ = £10 </div>	Ben	○ ○ ○ ○ ◐	Cara	○ ○	Dylan	○ ○ ◐	Ellie	○ ○ ○ ○ ○	<p>How much money does Ben have?</p> <p style="font-size: 24px; text-align: center;">£45</p>
Ben	○ ○ ○ ○ ◐								
Cara	○ ○								
Dylan	○ ○ ◐								
Ellie	○ ○ ○ ○ ○								
<p>I think of a number</p> <p>I add three to my number.</p> <p>Then I multiply by 4.</p> <p>The answer is 36.</p>	<p>What is my number?</p> $ \begin{array}{l} 36 \div 4 = 9 \\ 9 - 3 = 6 \\ \underline{\underline{6}} \end{array} $								
<p>A bag holds red and white sweets.</p> <p>$\frac{3}{10}$ of the sweets are red.</p> <p>What fraction of the sweets are white?</p>	$ \frac{7}{10} $								

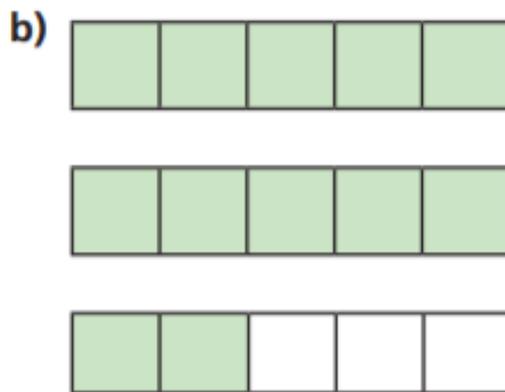
<p>5.1 – 1.3</p>  <p style="text-align: center;">3.8</p>	<p>15 × 100</p> 
<p>Shade in $\frac{2}{3}$ of the shape</p> <p>(any 6)</p>	
<p>This shape is made from three identical squares and three identical rectangles.</p> 	<p>Work out the perimeter of the shape</p> <p>length = 17.1 width = 1.5</p> <p>$P = \underline{37.2\text{cm}}$</p>
<p>Place the correct sign, < or > between this pair of numbers</p> <p>2 < 7</p>	

<p>$6,000 \div 100$</p> <p style="text-align: center; border: 1px solid black; padding: 5px; width: fit-content; margin: 0 auto;">60</p>	<p>$7 - 10$</p> <p style="text-align: center; border: 1px solid black; padding: 5px; width: fit-content; margin: 0 auto;">-3</p>
<p>Holly is saving money. In January, she saves £15.15 In February, she saves £8.82 In March, Holly saves £13.37 Work out how much she has saved in total.</p> <p style="font-size: 1.5em; margin-left: 20px;">£37.34</p>	
	<p>Arrange the towns in order of temperature, starting with the lowest.</p> <p style="font-family: cursive;">Redville Milton Newtown Castleville Leek</p>
<p>Which town has a temperature closest to 0°C?</p> <p style="font-size: 1.5em; font-family: cursive; margin-left: 20px;">Newtown</p>	

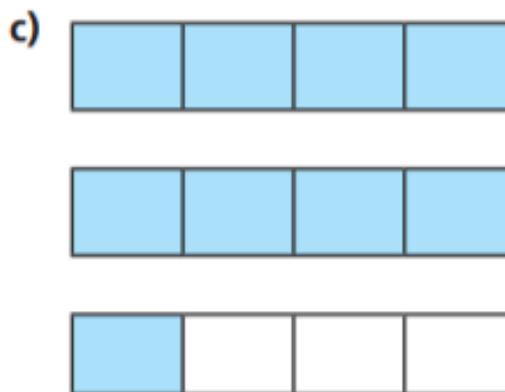
1 Convert the improper fractions to mixed numbers.



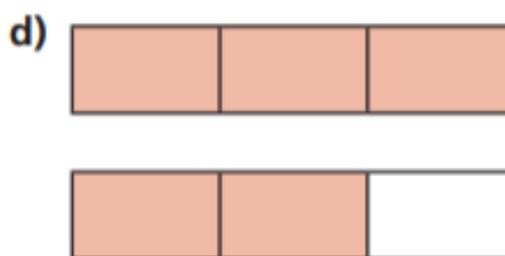
$$\frac{8}{5} = 1\frac{3}{5}$$



$$\frac{12}{5} = 2\frac{2}{5}$$



$$\frac{9}{4} = 2\frac{1}{4}$$



$$\frac{5}{3} = 1\frac{2}{3}$$

2

Shade the bar models to represent each improper fraction.
Convert the improper fractions to mixed numbers.



$$\frac{7}{3} = 2\frac{1}{3}$$



$$\frac{8}{3} = 2\frac{2}{3}$$



$$\frac{9}{4} = 2\frac{1}{4}$$



$$\frac{11}{4} = 2\frac{3}{4}$$

3 Convert the improper fractions to mixed numbers.

a) $\frac{10}{2} = \boxed{5}$

e) $\frac{12}{5} = \boxed{2\frac{2}{5}}$

b) $\frac{10}{3} = \boxed{3\frac{1}{3}}$

f) $\frac{13}{6} = \boxed{2\frac{1}{6}}$

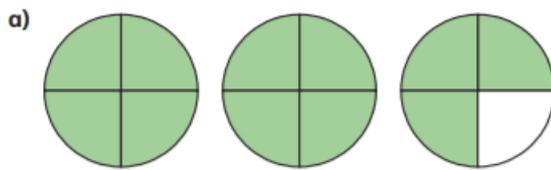
c) $\frac{10}{4} = \boxed{2\frac{1}{2}}$

g) $\frac{13}{7} = \boxed{1\frac{6}{7}}$

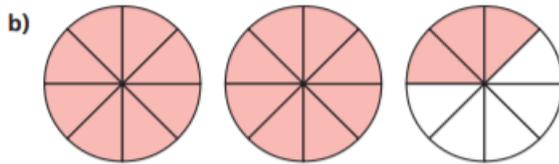
d) $\frac{10}{5} = \boxed{2}$

h) $\frac{31}{8} = \boxed{3\frac{7}{8}}$

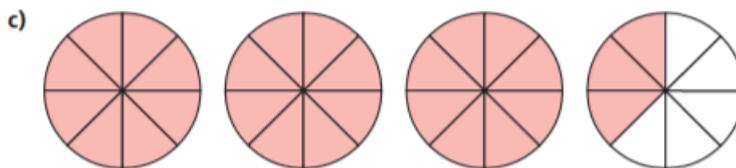
1 Convert the mixed numbers to improper fractions.



$2\frac{3}{4} = \frac{\boxed{11}}{4}$



$2\frac{3}{8} = \frac{\boxed{19}}{8}$



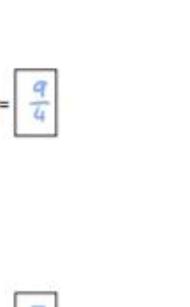
$3\frac{3}{8} = \frac{\boxed{27}}{8}$

2 Convert the mixed numbers to improper fractions.

Colour the bar models to help you.

a)  $2\frac{1}{4} = \frac{9}{4}$

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

c)  $3\frac{1}{3} = \frac{10}{3}$

d)  $3\frac{2}{5} = \frac{17}{5}$

3 Convert the mixed numbers to improper fractions.

Write the next conversion in each part.

a) $2\frac{1}{7} = \frac{15}{7}$ c) $5\frac{1}{2} = \frac{11}{2}$
 $2\frac{2}{7} = \frac{16}{7}$ $5\frac{1}{4} = \frac{21}{4}$
 $2\frac{3}{7} = \frac{17}{7}$ $5\frac{1}{8} = \frac{41}{8}$
 $2\frac{4}{7} = \frac{18}{7}$ $5\frac{1}{6} = \frac{31}{6}$

b) $3\frac{1}{5} = \frac{16}{5}$
 $4\frac{1}{5} = \frac{21}{5}$
 $5\frac{1}{5} = \frac{26}{5}$
 $6\frac{1}{5} = \frac{31}{5}$

Task 3

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.

$3\frac{1}{2}$

Dexter is converting improper fractions.



$$\frac{32}{3} = 3 \frac{2}{3}$$

Explain why Dexter is incorrect.

Find the value of ●

$$\frac{27}{\bullet} = \bullet \frac{2}{\bullet}$$

$$\bullet = \boxed{5}$$

Find two possible values for ★ and ▲

$$\frac{30}{\star} = \blacktriangle \frac{2}{\star}$$

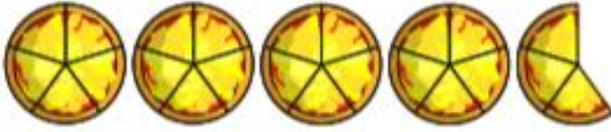
$$\star = \boxed{14}$$

$$\blacktriangle = \boxed{2}$$

$$\star = \boxed{7}$$

$$\blacktriangle = \boxed{4}$$

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



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

23

Whitney is converting mixed numbers to improper fractions.



$$4\frac{1}{7} = \frac{28}{7}$$

Do you agree with Whitney? No

Explain your answer.

She has converted 4 wholes to $\frac{28}{7}$ but
forgotten to add the extra seventh.

$$\text{○} \frac{3}{5} = \text{△} \frac{1}{5}$$

The table shows some possible values of the circle.

Use this to find the corresponding value of the triangle.

○	△
1	8
2	13
4	23
8	43
16	83
17	88
160	803

Challenge – answers

Fill in the missing numbers.

How many different possibilities can you find for each equation?

$$2 \frac{\square}{8} = \frac{\square}{8}$$

$$2 \frac{\square}{5} = \frac{\square}{5}$$

Compare the number of possibilities you found.

There are 7 possibilities for the top one and 4 for the bottom one.

1-7 for the numerator for the first fraction = 17-23 as numerator for improper fraction

1-4 for the numerator for second fraction = 11-14 as numerator for second improper fraction

The possibilities will be 1 less than the denominator