

Contents and Procedures

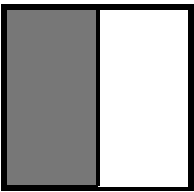
Page	Procedures
1, 2, 3, 4	<p><u>Name the fraction shaded.</u></p> <p>Write the correct fraction to each pattern. Find the fraction matching the pattern in the answer box.</p>
5, 6	<p><u>Which shaded pattern matches the fraction?</u></p> <p>Look for the code number next to the pattern and place the tile on that number in the LUK box.</p>
7, 8	<p><u>Addition of two fractions with the same denominator (bottom number).</u></p> <p>Add the two numerators (top numbers) and copy the denominator. Write the answer.</p> <p>Find the matching fraction and the code number.</p> $\frac{5}{8} + \frac{2}{8} = \frac{7}{8}$
9, 10, 11, 12	<p><u>Addition of a whole number and a fraction.</u></p> <p>Copy the whole number and then copy the fraction, regardless whether the whole number is in front of the fraction or behind it. The answer is a mixed number (whole number and a fraction).</p> $2 + \frac{3}{5} = 2 \frac{3}{5} \qquad \frac{4}{6} + 3 = 3 \frac{4}{6}$
13, 14, 15	<p><u>Addition of a whole number and a mixed number (whole number and a fraction).</u></p> <p>Add the two whole numbers and copy the fraction. The answer is a mixed number.</p> $3 + 2 \frac{4}{6} = 5 \frac{4}{6} \qquad 3 \frac{4}{7} + 2 = 5 \frac{4}{7}$

Page	Procedures
16, 17, 18, 19, 20	<p data-bbox="405 241 1050 277"><u>Addition of a mixed number and a fraction.</u></p> <p data-bbox="405 300 1331 412">Copy the whole number. Add the two fractions (same denominators) and write the new fraction after the whole number.</p> <p data-bbox="405 434 865 470">The answer is a mixed number.</p> <div style="display: flex; justify-content: space-around; align-items: center;"> <div data-bbox="606 497 906 649"> $\frac{1}{8} + 4\frac{1}{8} = 4\frac{2}{8}$ </div> <div data-bbox="1031 412 1321 528"> $5\frac{6}{10} + \frac{3}{10} = 5\frac{9}{10}$ </div> </div>
21, 22, 23, 24	<p data-bbox="405 761 1206 797"><u>Addition of two mixed numbers (same denominators).</u></p> <p data-bbox="405 833 1238 918">Add the two whole numbers and add the two fractions. The whole number comes first and then the fraction.</p> <p data-bbox="405 954 865 990">The answer is a mixed number.</p> <div style="text-align: center; margin-top: 20px;"> $3\frac{1}{7} + 2\frac{3}{7} = 5\frac{4}{7}$ </div>
25, 26	<p data-bbox="405 1267 1264 1303"><u>Subtraction of two fractions with the same denominators.</u></p> <p data-bbox="405 1330 1257 1406">Take (subtract) the second fraction from the first fraction. Subtract the numerator and copy the denominator.</p> <p data-bbox="405 1429 769 1464">The answer is a fraction.</p> <div style="text-align: center; margin-top: 20px;"> $\frac{5}{9} - \frac{3}{9} = \frac{2}{9}$ </div>
27, 28	<p data-bbox="405 1693 1343 1729"><u>Subtract a fraction from a mixed number (same denominators).</u></p> <p data-bbox="405 1756 1184 1868">Copy the whole number and then take the second fraction from the first fraction (subtract the numerator and copy the denominator).</p> <p data-bbox="405 1881 865 1917">The answer is a mixed number.</p> <div style="text-align: center; margin-top: 20px;"> $6\frac{4}{5} - \frac{2}{5} = 6\frac{2}{5}$ </div>

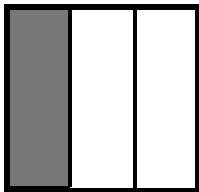
Page	Procedures
29, 30	<p><u>Subtraction: two mixed numbers.</u></p> <p>First subtract the second whole number from the first whole number. Then subtract the second fraction from the first fraction (subtract the numerator and copy the denominator).</p> <p>The answer is a mixed number.</p> $4\frac{7}{8} - 2\frac{3}{8} = 2\frac{5}{8}$
31	<p><u>Subtraction or addition of two mixed numbers.</u></p> <p>Addition: add the whole numbers and then the two fractions.</p> <p>Subtraction: Subtract the whole numbers and then the fractions.</p> <p>In both, the addition and the subtraction, the answer is a mixed number.</p> $4\frac{3}{6} + 2\frac{1}{6} = 6\frac{4}{6}$ $4\frac{5}{7} - 3\frac{2}{7} = 1\frac{3}{7}$
32	<p><u>Assessment page.</u></p> <p>A combination of all learnt procedures from page 1 to page 31. The outcome will specify which procedure (which page) needs to be further reinforced or if the student is ready to progress to the next level.</p>
33	<p><u>Progress chart.</u></p> <p>List of patterns used on pages 1 to 32.</p> <p>Colour the patterns one by one as you progress from page to page.</p>

What fraction is shaded?

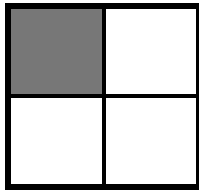
1 $\frac{1}{2}$



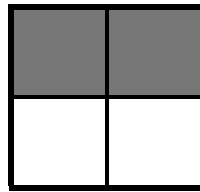
2



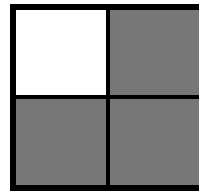
3



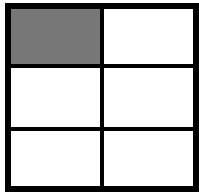
4



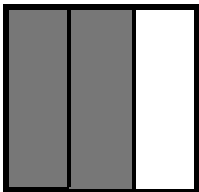
5



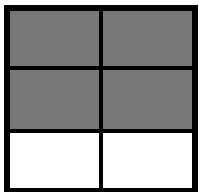
6



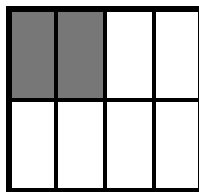
7



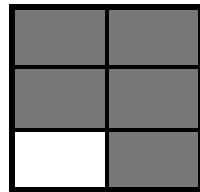
8



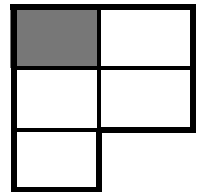
9



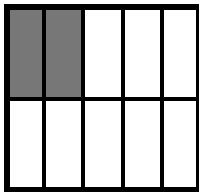
10



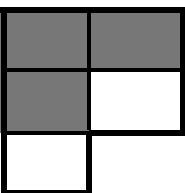
11



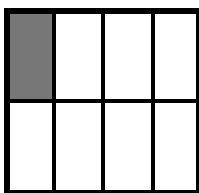
12



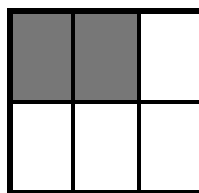
13



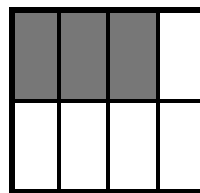
14



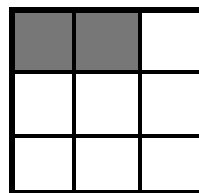
15



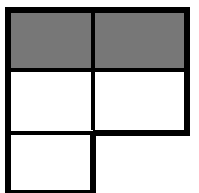
16



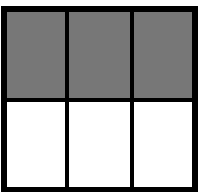
17



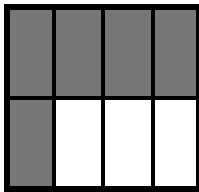
18



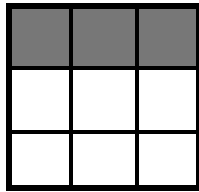
19



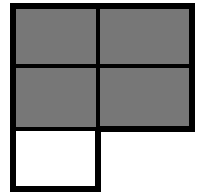
20



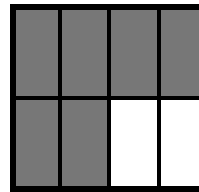
21



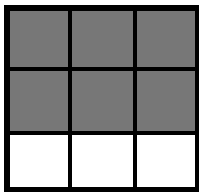
22



23

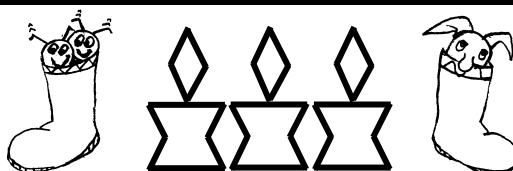


24



What fraction is shaded? The fractions matching the shaded patterns are in the box below. Check and cross the answers. The number in the corner is the number to look for to place the tile on into the LUK

$\frac{3}{4}$ 1	$\frac{5}{6}$ 2	$\frac{4}{6}$ 3	$\frac{1}{5}$ 4	$\frac{2}{3}$ 5	$\frac{2}{10}$ 6	$\frac{2}{6}$ 7	$\frac{2}{5}$ 8
$\frac{3}{5}$ 9	$\frac{3}{8}$ 10	$\frac{1}{8}$ 11	$\frac{4}{5}$ 12	$\frac{3}{9}$ 13	$\frac{6}{9}$ 14	$\frac{5}{8}$ 15	$\frac{6}{8}$ 16
$\frac{2}{9}$ 17	$\frac{3}{6}$ 18	$\frac{2}{8}$ 19	$\frac{1}{4}$ 20	$\frac{1}{2}$ 21 ✓	$\frac{2}{4}$ 22	$\frac{1}{3}$ 23	$\frac{1}{6}$ 24



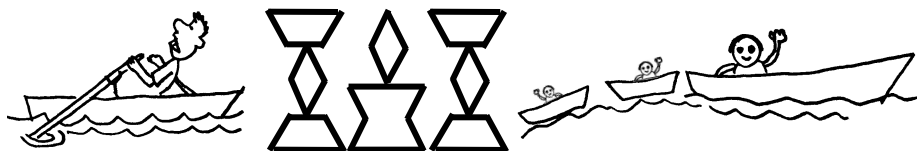
1	$\frac{2}{4} + \frac{1}{4} = \frac{3}{4}$
2	$\frac{1}{2} + \frac{1}{2} =$
3	$\frac{2}{3} + \frac{1}{3} =$
4	$\frac{1}{3} + \frac{1}{3} =$
5	$\frac{1}{4} + \frac{1}{4} =$
6	$\frac{1}{5} + \frac{2}{5} =$
7	$\frac{3}{5} + \frac{1}{5} =$
8	$\frac{1}{5} + \frac{1}{5} =$
9	$\frac{2}{5} + \frac{3}{5} =$
10	$\frac{5}{6} + \frac{1}{6} =$
11	$\frac{3}{6} + \frac{2}{6} =$
12	$\frac{3}{6} + \frac{1}{6} =$

13	$\frac{2}{6} + \frac{1}{6} =$
14	$\frac{1}{6} + \frac{1}{6} =$
15	$\frac{2}{7} + \frac{3}{7} =$
16	$\frac{1}{7} + \frac{1}{7} =$
17	$\frac{3}{7} + \frac{3}{7} =$
18	$\frac{2}{7} + \frac{2}{7} =$
19	$\frac{2}{7} + \frac{1}{7} =$
20	$\frac{4}{7} + \frac{3}{7} =$
21	$\frac{2}{8} + \frac{3}{8} =$
22	$\frac{3}{8} + \frac{3}{8} =$
23	$\frac{2}{8} + \frac{2}{8} =$
24	$\frac{4}{8} + \frac{4}{8} =$

Check and cross the answers.

The number in the corner is the code number to look for to place the tile on into the LUK box.

$\frac{5}{8}$	1	$\frac{8}{8}$	2	$\frac{2}{5}$	3	$\frac{5}{6}$	4	$\frac{6}{7}$	5	$\frac{3}{7}$	6	$\frac{2}{4}$	7	$\frac{6}{6}$	8
$\frac{3}{6}$	9	$\frac{2}{7}$	10	$\frac{4}{5}$	11	$\frac{4}{6}$	12	$\frac{5}{7}$	13	$\frac{4}{7}$	14	$\frac{7}{7}$	15	$\frac{4}{8}$	16
$\frac{2}{6}$	17	$\frac{6}{8}$	18	$\frac{5}{5}$	19	$\frac{3}{3}$	20	$\frac{3}{4}$	21 ✓	$\frac{2}{3}$	22	$\frac{2}{2}$	23	$\frac{3}{5}$	24



$$1 \quad \frac{4}{7} + 1\frac{2}{7} = 1\frac{6}{7}$$

$$2 \quad \frac{1}{6} + 2\frac{3}{6} =$$

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

$$4 \quad \frac{3}{8} + 2\frac{3}{8} =$$

$$5 \quad \frac{1}{5} + 3\frac{1}{5} =$$

$$6 \quad \frac{1}{7} + 3\frac{1}{7} =$$

$$7 \quad \frac{3}{10} + 1\frac{4}{10} =$$

$$8 \quad \frac{1}{4} + 3\frac{1}{4} =$$

$$9 \quad \frac{1}{5} + 2\frac{3}{5} =$$

$$10 \quad \frac{1}{7} + 2\frac{4}{7} =$$

$$11 \quad \frac{2}{8} + 1\frac{3}{8} =$$

$$12 \quad \frac{1}{7} + 2\frac{2}{7} =$$

$$13 \quad \frac{2}{6} + 1\frac{3}{6} =$$

$$14 \quad \frac{2}{8} + 2\frac{1}{8} =$$

$$15 \quad \frac{3}{10} + 3\frac{1}{10} =$$

$$16 \quad \frac{1}{6} + 3\frac{2}{6} =$$

$$17 \quad \frac{1}{7} + 3\frac{2}{7} =$$

$$18 \quad \frac{2}{8} + 3\frac{2}{8} =$$

$$19 \quad \frac{3}{9} + 1\frac{3}{9} =$$

$$20 \quad \frac{3}{10} + 2\frac{3}{10} =$$

$$21 \quad \frac{5}{8} + 1\frac{2}{8} =$$

$$22 \quad \frac{2}{9} + 3\frac{2}{9} =$$

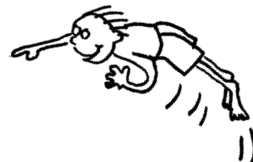
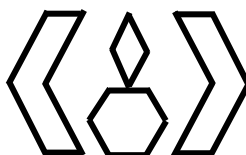
$$23 \quad \frac{1}{8} + 3\frac{1}{8} =$$

$$24 \quad \frac{3}{9} + 1\frac{2}{9} =$$

Check and cross the answers.

The number in the corner is the code number to look for to place the tile on into the LUK box.

$3\frac{2}{5}$ 1	$1\frac{5}{9}$ 2	$1\frac{7}{10}$ 3	$2\frac{3}{7}$ 4	$2\frac{6}{10}$ 5	$1\frac{5}{8}$ 6	$2\frac{4}{5}$ 7	$3\frac{4}{8}$ 8
$2\frac{3}{8}$ 9	$3\frac{4}{9}$ 10	$1\frac{5}{6}$ 11	$2\frac{6}{8}$ 12	$1\frac{7}{8}$ 13	$2\frac{5}{7}$ 14	$2\frac{4}{6}$ 15	$3\frac{2}{7}$ 16
$3\frac{2}{4}$ 17	$3\frac{2}{8}$ 18	$3\frac{4}{10}$ 19	$1\frac{3}{5}$ 20	$3\frac{3}{7}$ 21	$1\frac{6}{9}$ 22	$1\frac{6}{7}$ 23 ✓	$3\frac{3}{6}$ 24



$$\boxed{1} \quad \frac{7}{8} - \frac{3}{8} = \frac{4}{8}$$

$$\boxed{2} \quad \frac{2}{3} - \frac{1}{3} =$$

$$\boxed{3} \quad \frac{4}{5} - \frac{2}{5} =$$

$$\boxed{4} \quad \frac{6}{9} - \frac{3}{9} =$$

$$\boxed{5} \quad \frac{5}{6} - \frac{2}{6} =$$

$$\boxed{6} \quad \frac{5}{7} - \frac{2}{7} =$$

$$\boxed{7} \quad \frac{6}{8} - \frac{5}{8} =$$

$$\boxed{8} \quad \frac{3}{4} - \frac{1}{4} =$$

$$\boxed{9} \quad \frac{7}{8} - \frac{5}{8} =$$

$$\boxed{10} \quad \frac{6}{7} - \frac{4}{7} =$$

$$\boxed{11} \quad \frac{8}{9} - \frac{6}{9} =$$

$$\boxed{12} \quad \frac{9}{10} - \frac{3}{10} =$$



$$\boxed{13} \quad \frac{2}{4} - \frac{1}{4} =$$

$$\boxed{14} \quad \frac{4}{6} - \frac{3}{6} =$$

$$\boxed{15} \quad \frac{8}{9} - \frac{3}{9} =$$

$$\boxed{16} \quad \frac{7}{10} - \frac{5}{10} =$$

$$\boxed{17} \quad \frac{4}{5} - \frac{3}{5} =$$

$$\boxed{18} \quad \frac{5}{7} - \frac{4}{7} =$$

$$\boxed{19} \quad \frac{7}{8} - \frac{2}{8} =$$

$$\boxed{20} \quad \frac{9}{10} - \frac{4}{10} =$$

$$\boxed{21} \quad \frac{7}{9} - \frac{1}{9} =$$

$$\boxed{22} \quad \frac{7}{8} - \frac{4}{8} =$$

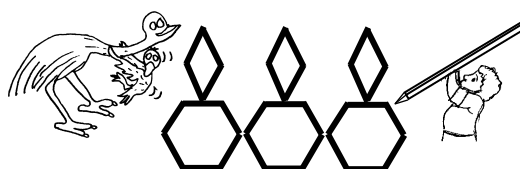
$$\boxed{23} \quad \frac{6}{7} - \frac{2}{7} =$$

$$\boxed{24} \quad \frac{5}{6} - \frac{1}{6} =$$

Check and cross the answers.

The number in the corner is the code number to look for to place the tile on into the LUK box.

$\frac{2}{4}$ 1	$\frac{2}{9}$ 2	$\frac{1}{8}$ 3	$\frac{6}{10}$ 4	$\frac{3}{6}$ 5	$\frac{2}{7}$ 6	$\frac{2}{4}$ 7	$\frac{2}{10}$ 8
$\frac{1}{6}$ 9	$\frac{3}{8}$ 10	$\frac{5}{9}$ 11	$\frac{1}{7}$ 12	$\frac{4}{8}$ 13 ✓	$\frac{3}{9}$ 14	$\frac{1}{3}$ 15	$\frac{3}{7}$ 16
$\frac{2}{8}$ 17	$\frac{2}{5}$ 18	$\frac{5}{10}$ 19	$\frac{4}{7}$ 20	$\frac{1}{5}$ 21	$\frac{5}{8}$ 22	$\frac{6}{9}$ 23	$\frac{4}{6}$ 24



$$1 \quad 5 + \frac{1}{3} =$$

$$13 \quad \frac{8}{9} - \frac{2}{9} =$$

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

$$14 \quad 4\frac{7}{8} - \frac{2}{8} =$$

$$3 \quad 4\frac{1}{2} + 2 =$$

$$15 \quad 3\frac{9}{10} - \frac{3}{10} =$$

$$4 \quad 5\frac{1}{3} + 2\frac{1}{3} =$$

$$16 \quad 6\frac{4}{6} - 2\frac{1}{6} =$$

$$5 \quad \frac{3}{5} + 4 =$$

$$17 \quad 5\frac{8}{10} - 3 =$$

$$6 \quad \frac{2}{7} + 3\frac{2}{7} =$$

$$18 \quad 3\frac{5}{8} - 2\frac{1}{8} =$$

$$7 \quad \frac{4}{8} + \frac{3}{8} =$$

$$19 \quad \frac{6}{7} - \frac{3}{7} =$$

$$8 \quad 3\frac{1}{4} + \frac{1}{4} =$$

$$20 \quad 2\frac{6}{10} - \frac{3}{10} =$$

$$9 \quad 1\frac{2}{5} + 3\frac{1}{5} =$$

$$21 \quad 4\frac{5}{6} - 1\frac{3}{6} =$$

$$10 \quad 2\frac{6}{9} + \frac{2}{9} =$$

$$22 \quad 4\frac{5}{9} - 2 =$$

$$11 \quad \frac{4}{7} + 3\frac{2}{7} =$$

$$23 \quad \frac{3}{4} - \frac{2}{4} =$$

$$12 \quad \frac{5}{9} + \frac{2}{9} =$$

$$24 \quad 6\frac{5}{8} - \frac{2}{8} =$$

Check and cross the answers.

The number in the corner is the code number to look for to place the tile on into the LUK box.

$4\frac{3}{5}$ 1	$2\frac{8}{9}$ 2	$\frac{7}{8}$ 3	$\frac{7}{9}$ 4	$3\frac{2}{4}$ 5	$3\frac{6}{7}$ 6	$4\frac{3}{5}$ 7	$6\frac{1}{2}$ 8
$4\frac{2}{5}$ 9	$3\frac{4}{7}$ 10	$5\frac{1}{3}$ 11	$7\frac{2}{3}$ 12	$3\frac{6}{10}$ 13	$1\frac{4}{8}$ 14	$4\frac{5}{8}$ 15	$2\frac{5}{9}$ 16
$\frac{6}{9}$ 17	$4\frac{3}{6}$ 18	$3\frac{2}{6}$ 19	$6\frac{3}{8}$ 20	$2\frac{8}{10}$ 21	$\frac{3}{7}$ 22	$2\frac{3}{10}$ 23	$\frac{1}{4}$ 24

