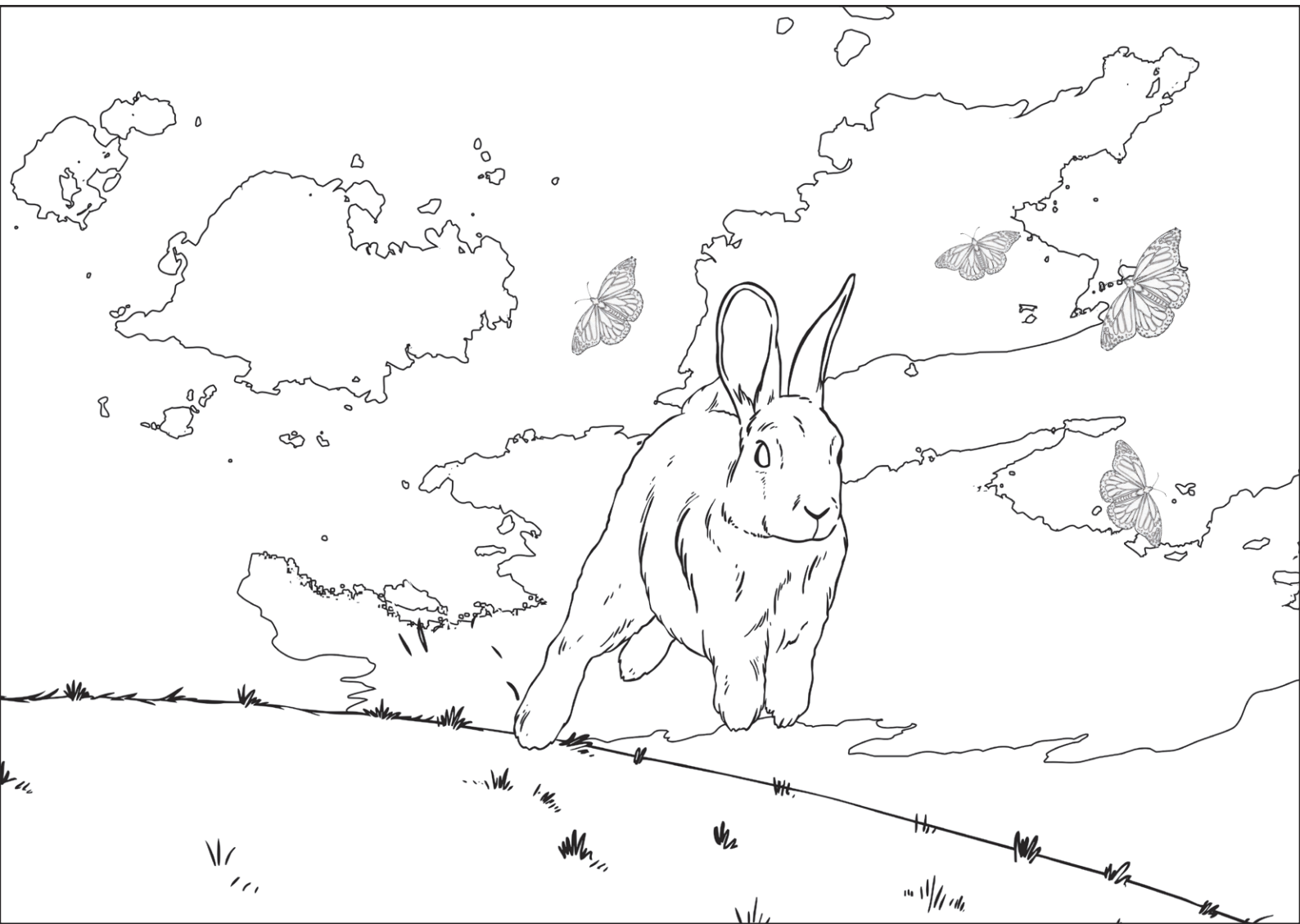






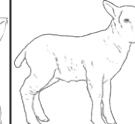
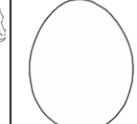




# Spring Maths Activity Booklet Answers



# Compare Code Breaker

									
3	1	6	5	4	0	8	7	2	9

Use the code breaker to compare these decimal fractions.

0	●	1	6	4	<	0	●	1	7	2
---	---	---	---	---	---	---	---	---	---	---

0	●	0	8	7	>	0	●	0	8	5
---	---	---	---	---	---	---	---	---	---	---

0	●	1	0	1	>	0	●	0	9	4
---	---	---	---	---	---	---	---	---	---	---

1	●	0	0	5	<	1	●	0	1	
---	---	---	---	---	---	---	---	---	---	--

0	●	8	6	5	<	1	●	0	2	
---	---	---	---	---	---	---	---	---	---	--

	4	1	●	1	>	4	1	●	0	6
--	---	---	---	---	---	---	---	---	---	---

0	●	0	1	6	<	0	●	0	2	
---	---	---	---	---	---	---	---	---	---	--

0	●	0	3	8	<	0	●	1	3	
---	---	---	---	---	---	---	---	---	---	--

# Calculations Code Breaker

Reveal a spring-themed joke by writing the percentage equivalent to the following fractions and decimal fractions. Use the grid to locate the letter that matches each answer. The joke will read across the tables.

A	B	C	D	E	F	G	H	I	J	K	L	M
6%	15%	21%	5%	13%	24%	18%	7%	12%	1%	25%	19%	9%
N	O	P	Q	R	S	T	U	V	W	X	Y	Z
22%	16%	11%	26%	2%	17%	20%	3%	10%	8%	14%	23%	4%

	0.08	$\frac{7}{100}$	0.06	$\frac{1}{5}$
Answer	8%	7%	6%	20%
Letter	W	H	A	T

$\frac{18}{100}$	0.16	$\frac{13}{100}$	0.17
18%	16%	13%	17%
G	O	E	S

$\frac{3}{100}$	0.11
3%	11%
U	P

	$\frac{2}{25}$	0.07	$\frac{13}{100}$	0.22
Answer	8%	7%	13%	22%
Letter	W	H	E	N

$\frac{2}{10}$	0.07	$\frac{13}{100}$
20%	7%	13%
T	H	E

0.02	$\frac{6}{100}$	0.12	$\frac{22}{100}$
2%	6%	12%	22%
R	A	I	N

	0.21	$\frac{4}{25}$	0.09	$\frac{13}{100}$	0.17
Answer	21%	16%	9%	13%	17%
Letter	C	O	M	E	S

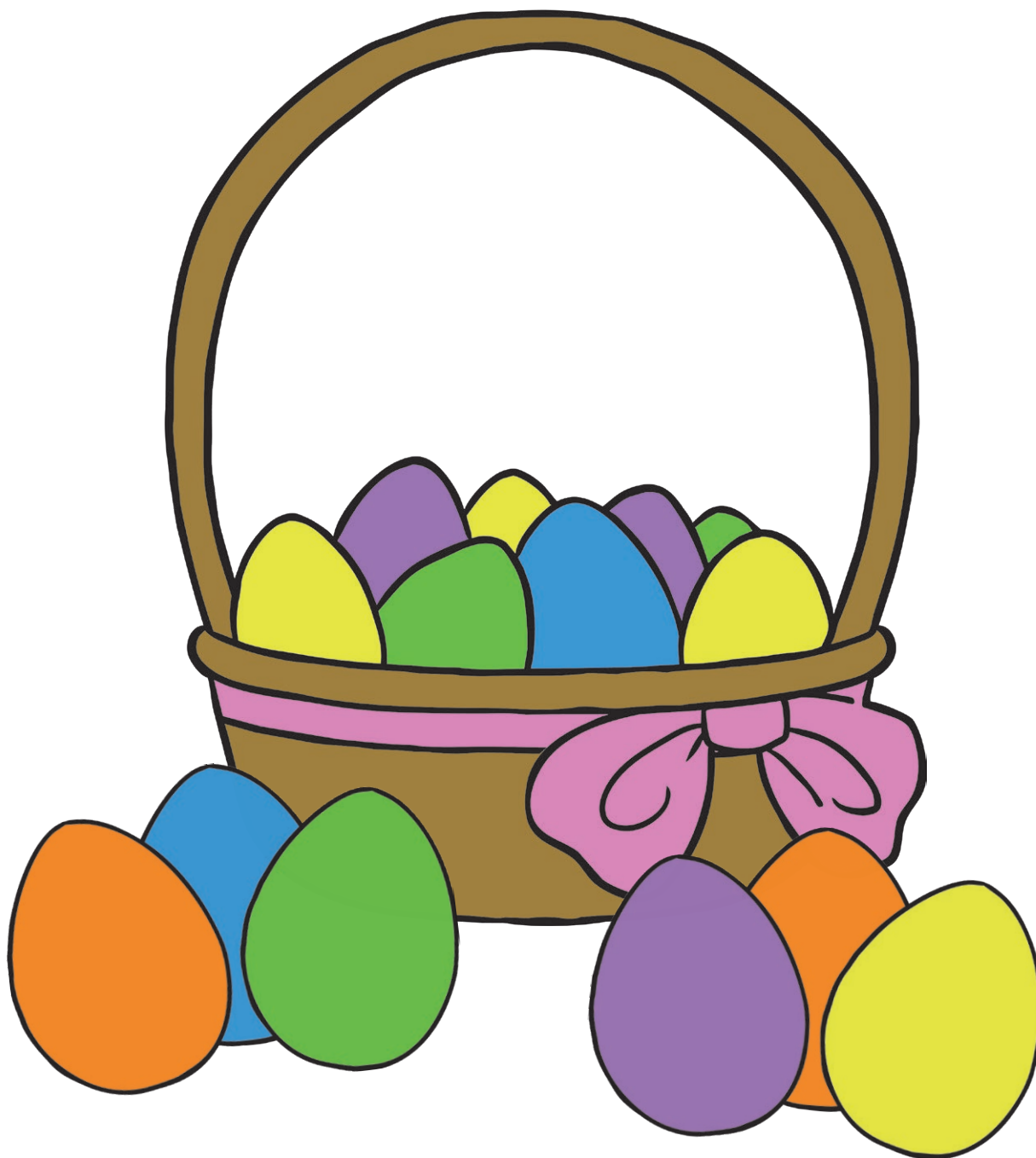
$\frac{5}{100}$	0.16	$\frac{8}{100}$	0.22	
5%	16%	8%	22%	
D	O	W	N	?

	0.06	$\frac{22}{100}$
Answer	6%	22%
Letter	A	N

0.03	$\frac{9}{100}$	0.15	$\frac{2}{100}$	0.13	$\frac{19}{100}$	0.19	$\frac{6}{100}$
3%	9%	15%	2%	13%	19%	19%	6%
U	M	B	R	E	L	L	A










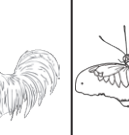
# Colour by Calculation

Round each number to the nearest tenth. Use the key to colour the spring-themed picture.



Pink:	Orange:	Yellow:	Green:	Light Purple:	Blue:
0.6	0.1	0.2	0.3	0.4	0.5

# Number Cross

									
<b>3</b>	<b>1</b>	<b>6</b>	<b>5</b>	<b>4</b>	<b>0</b>	<b>8</b>	<b>7</b>	<b>2</b>	<b>9</b>

Use the spring-themed code breaker to discover the clues to the number cross. Use written methods of multiplication to solve the number cross.

<sup>1</sup> 1	<sup>2</sup> 7	.8	<sup>3</sup> 6		<sup>4</sup> 5		<sup>5</sup> 3	0	.9	<sup>6</sup> 2		<sup>7</sup> 7
	.3		.0		.6		4			<sup>8</sup> 4	5	6
	<sup>9</sup> 9	4	0	<sup>10</sup> 2		<sup>11</sup> 6	0	.9	<sup>12</sup> 6			.4
			<sup>13</sup> 3	4	9		5		2		<sup>14</sup> 7	
<sup>15</sup> 9				.8					<sup>16</sup> 3	.0	6	7
.0			<sup>17</sup> 3	2	0	<sup>18</sup> 1					.4	
2			4			.7		<sup>19</sup> 8		<sup>20</sup> 6	1	<sup>21</sup> 8
<sup>22</sup> 8	<sup>23</sup> 7	.5	6		<sup>24</sup> 6	8	.0	9		2		.0
	4					3		<sup>25</sup> 4	.5	6		0
	<sup>26</sup> 5	.6	0	1				.3		<sup>27</sup> 7	8	2

## Number Cross: Across

1.

1	•	7	8	6	×	1	0		
---	---	---	---	---	---	---	---	--	--

5.

3	0	9	2	÷	1	0	0		
---	---	---	---	---	---	---	---	--	--

8.

	4	•	5	6	×	1	0	0	
--	---	---	---	---	---	---	---	---	--

9.

9	•	4	0	2	×	1	0	0	0
---	---	---	---	---	---	---	---	---	---

11.

6	0	9	•	6	÷	1	0		
---	---	---	---	---	---	---	---	--	--

13.

	3	4	•	9	×	1	0		
--	---	---	---	---	---	---	---	--	--

16.

3	0	6	7	÷	1	0	0	0	
---	---	---	---	---	---	---	---	---	--

17.

3	2	•	0	1	×	1	0	0	
---	---	---	---	---	---	---	---	---	--

20.

	6	1	•	8	×	1	0		
--	---	---	---	---	---	---	---	--	--

22.

8	7	5	6	÷	1	0	0		
---	---	---	---	---	---	---	---	--	--

24.

6	•	8	0	9	×	1	0		
---	---	---	---	---	---	---	---	--	--

25.

	4	5	6	÷	1	0	0		
--	---	---	---	---	---	---	---	--	--

26.

5	6	0	1	÷	1	0	0	0	
---	---	---	---	---	---	---	---	---	--

27.

	7	8	•	2	×	1	0		
--	---	---	---	---	---	---	---	--	--

## Number Cross: Down

2.		7	3	9	÷	1	0	0	
3.	6	0	0	3	÷	1	0	0	0
4.	0	●	0	5	6	×	1	0	0
5.	3	●	4	0	5	×	1	0	0
6.	0	●	0	2	4	×	1	0	0
7.	7	6	4	0	÷	1	0	0	
10.	2	●	4	8	2	×	1	0	
12.		6	●	5	3	×	1	0	0
14.	7	6	4	1	÷	1	0	0	
15.	9	0	2	8	÷	1	0	0	0
17.		3	●	4	6	×	1	0	0
18.	1	7	8	3	÷	1	0	0	0
19.	8	●	9	4	3	×	1	0	0
20.	6	●	2	6	7	×	1	0	0
21.	8	0	0	2	÷	1	0	0	0
23.		7	●	4	5	×	1	0	0

# Maths Mosaic

Calculate each answer and find the colour to shade each square.

Grey:	Pink:	Blue:	Black:	White:
< 1	1 - 1.99	2 - 2.99	3 - 3.99	4 - 4.99

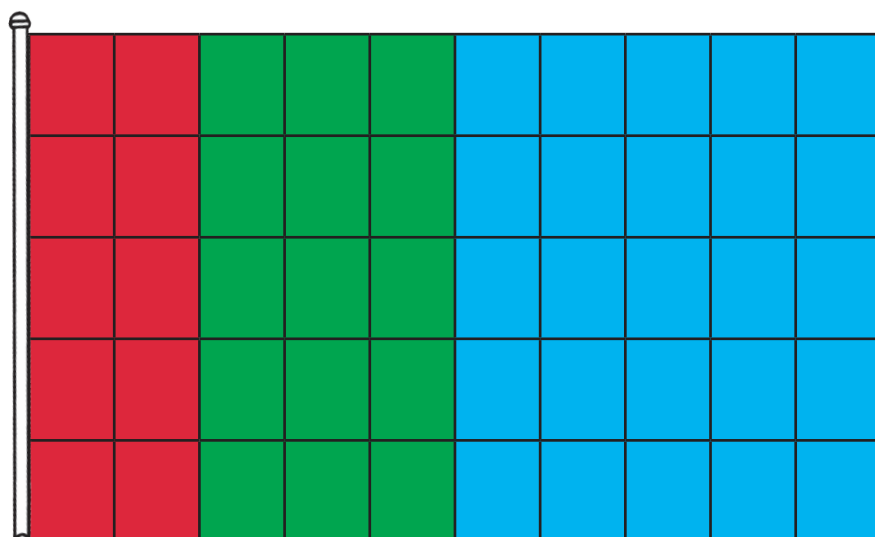
$\begin{array}{r} 5.8 \\ - 3.23 \\ \hline \end{array}$	$\begin{array}{r} 1.78 \\ + 0.8 \\ \hline \end{array}$	$\begin{array}{r} 3.4 \\ - 0.57 \\ \hline \end{array}$	$\begin{array}{r} 0.7 \\ + 0.24 \\ \hline \end{array}$	$\begin{array}{r} 8.1 \\ - 7.35 \\ \hline \end{array}$	$\begin{array}{r} 5.67 \\ - 3.2 \\ \hline \end{array}$	$\begin{array}{r} 0.18 \\ + 0.71 \\ \hline \end{array}$	$\begin{array}{r} 1.65 \\ - 0.9 \\ \hline \end{array}$	$\begin{array}{r} 7.66 \\ - 6.9 \\ \hline \end{array}$	$\begin{array}{r} 0.2 \\ + 2.47 \\ \hline \end{array}$
$\begin{array}{r} 4.5 \\ - 2.14 \\ \hline \end{array}$	$\begin{array}{r} 7.5 \\ - 5.03 \\ \hline \end{array}$	$\begin{array}{r} 0.98 \\ + 1.2 \\ \hline \end{array}$	$\begin{array}{r} 5.3 \\ - 3.78 \\ \hline \end{array}$	$\begin{array}{r} 4.5 \\ - 3.6 \\ \hline \end{array}$	$\begin{array}{r} 4.87 \\ - 2.3 \\ \hline \end{array}$	$\begin{array}{r} 0.1 \\ + 0.78 \\ \hline \end{array}$	$\begin{array}{r} 7.3 \\ - 6.12 \\ \hline \end{array}$	$\begin{array}{r} 0.45 \\ + 0.1 \\ \hline \end{array}$	$\begin{array}{r} 5.4 \\ - 3.12 \\ \hline \end{array}$
$\begin{array}{r} 1.2 \\ + 1.34 \\ \hline \end{array}$	$\begin{array}{r} 6.7 \\ - 4.5 \\ \hline \end{array}$	$\begin{array}{r} 0.56 \\ + 1.6 \\ \hline \end{array}$	$\begin{array}{r} 3.76 \\ - 2.3 \\ \hline \end{array}$	$\begin{array}{r} 0.56 \\ + 0.4 \\ \hline \end{array}$	$\begin{array}{r} 0.76 \\ + 1.9 \\ \hline \end{array}$	$\begin{array}{r} 0.24 \\ + 0.7 \\ \hline \end{array}$	$\begin{array}{r} 2.76 \\ - 0.9 \\ \hline \end{array}$	$\begin{array}{r} 0.39 \\ + 0.3 \\ \hline \end{array}$	$\begin{array}{r} 2.56 \\ + 0.2 \\ \hline \end{array}$
$\begin{array}{r} 9.2 \\ - 6.89 \\ \hline \end{array}$	$\begin{array}{r} 1.4 \\ + 1.34 \\ \hline \end{array}$	$\begin{array}{r} 3.4 \\ - 0.87 \\ \hline \end{array}$	$\begin{array}{r} 1.23 \\ + 0.6 \\ \hline \end{array}$	$\begin{array}{r} 6.95 \\ - 6.3 \\ \hline \end{array}$	$\begin{array}{r} 2.1 \\ + 0.45 \\ \hline \end{array}$	$\begin{array}{r} 8.2 \\ - 7.89 \\ \hline \end{array}$	$\begin{array}{r} 7.46 \\ - 6.3 \\ \hline \end{array}$	$\begin{array}{r} 7.12 \\ - 6.7 \\ \hline \end{array}$	$\begin{array}{r} 5.8 \\ - 3.43 \\ \hline \end{array}$
$\begin{array}{r} 3.46 \\ - 0.86 \\ \hline \end{array}$	$\begin{array}{r} 1.67 \\ + 0.9 \\ \hline \end{array}$	$\begin{array}{r} 0.23 \\ + 0.4 \\ \hline \end{array}$	$\begin{array}{r} 0.12 \\ + 0.5 \\ \hline \end{array}$	$\begin{array}{r} 9.45 \\ - 8.8 \\ \hline \end{array}$	$\begin{array}{r} 0.12 \\ + 0.7 \\ \hline \end{array}$	$\begin{array}{r} 6.5 \\ - 5.87 \\ \hline \end{array}$	$\begin{array}{r} 0.4 \\ + 0.57 \\ \hline \end{array}$	$\begin{array}{r} 3.98 \\ - 3.7 \\ \hline \end{array}$	$\begin{array}{r} 1.45 \\ + 1.2 \\ \hline \end{array}$
$\begin{array}{r} 3.7 \\ - 0.98 \\ \hline \end{array}$	$\begin{array}{r} 3.4 \\ + 1.39 \\ \hline \end{array}$	$\begin{array}{r} 1.56 \\ + 1.7 \\ \hline \end{array}$	$\begin{array}{r} 4.35 \\ - 4.2 \\ \hline \end{array}$	$\begin{array}{r} 0.37 \\ + 0.3 \\ \hline \end{array}$	$\begin{array}{r} 9.4 \\ - 5.21 \\ \hline \end{array}$	$\begin{array}{r} 7.02 \\ - 3.4 \\ \hline \end{array}$	$\begin{array}{r} 5.1 \\ - 4.67 \\ \hline \end{array}$	$\begin{array}{r} 0.23 \\ + 0.6 \\ \hline \end{array}$	$\begin{array}{r} 2.1 \\ + 0.67 \\ \hline \end{array}$
$\begin{array}{r} 3.6 \\ - 0.76 \\ \hline \end{array}$	$\begin{array}{r} 2.76 \\ + 1.6 \\ \hline \end{array}$	$\begin{array}{r} 7.8 \\ - 3.45 \\ \hline \end{array}$	$\begin{array}{r} 9.1 \\ - 8.56 \\ \hline \end{array}$	$\begin{array}{r} 6.12 \\ - 5.4 \\ \hline \end{array}$	$\begin{array}{r} 6.07 \\ - 1.4 \\ \hline \end{array}$	$\begin{array}{r} 2.76 \\ + 1.6 \\ \hline \end{array}$	$\begin{array}{r} 1.56 \\ - 0.8 \\ \hline \end{array}$	$\begin{array}{r} 7.57 \\ - 6.9 \\ \hline \end{array}$	$\begin{array}{r} 5.6 \\ - 3.16 \\ \hline \end{array}$
$\begin{array}{r} 4.5 \\ - 3.88 \\ \hline \end{array}$	$\begin{array}{r} 0.54 \\ + 0.3 \\ \hline \end{array}$	$\begin{array}{r} 3.2 \\ - 2.87 \\ \hline \end{array}$	$\begin{array}{r} 0.56 \\ + 0.2 \\ \hline \end{array}$	$\begin{array}{r} 7.5 \\ - 6.89 \\ \hline \end{array}$	$\begin{array}{r} 2.3 \\ - 1.87 \\ \hline \end{array}$	$\begin{array}{r} 0.23 \\ + 0.6 \\ \hline \end{array}$	$\begin{array}{r} 0.87 \\ + 0.1 \\ \hline \end{array}$	$\begin{array}{r} 6.35 \\ - 5.7 \\ \hline \end{array}$	$\begin{array}{r} 2.4 \\ + 0.23 \\ \hline \end{array}$
$\begin{array}{r} 7.12 \\ - 6.4 \\ \hline \end{array}$	$\begin{array}{r} 0.76 \\ + 0.8 \\ \hline \end{array}$	$\begin{array}{r} 0.56 \\ + 0.9 \\ \hline \end{array}$	$\begin{array}{r} 3.7 \\ - 2.09 \\ \hline \end{array}$	$\begin{array}{r} 0.34 \\ + 0.5 \\ \hline \end{array}$	$\begin{array}{r} 8.9 \\ - 7.93 \\ \hline \end{array}$	$\begin{array}{r} 0.06 \\ + 0.4 \\ \hline \end{array}$	$\begin{array}{r} 3.4 \\ - 2.67 \\ \hline \end{array}$	$\begin{array}{r} 0.4 \\ + 0.38 \\ \hline \end{array}$	$\begin{array}{r} 8.7 \\ - 6.23 \\ \hline \end{array}$
$\begin{array}{r} 0.37 \\ + 0.6 \\ \hline \end{array}$	$\begin{array}{r} 4.5 \\ - 4.07 \\ \hline \end{array}$	$\begin{array}{r} 2.56 \\ - 1.2 \\ \hline \end{array}$	$\begin{array}{r} 3.4 \\ - 3.03 \\ \hline \end{array}$	$\begin{array}{r} 5.05 \\ - 4.1 \\ \hline \end{array}$	$\begin{array}{r} 7.6 \\ - 7.23 \\ \hline \end{array}$	$\begin{array}{r} 0.1 \\ + 0.89 \\ \hline \end{array}$	$\begin{array}{r} 4.6 \\ - 4.08 \\ \hline \end{array}$	$\begin{array}{r} 0.23 \\ + 0.6 \\ \hline \end{array}$	$\begin{array}{r} 0.01 \\ + 1.99 \\ \hline \end{array}$



# Spring Flags

These flags have been designed on centimetre square grids.

Colour the flags according to the fractions:



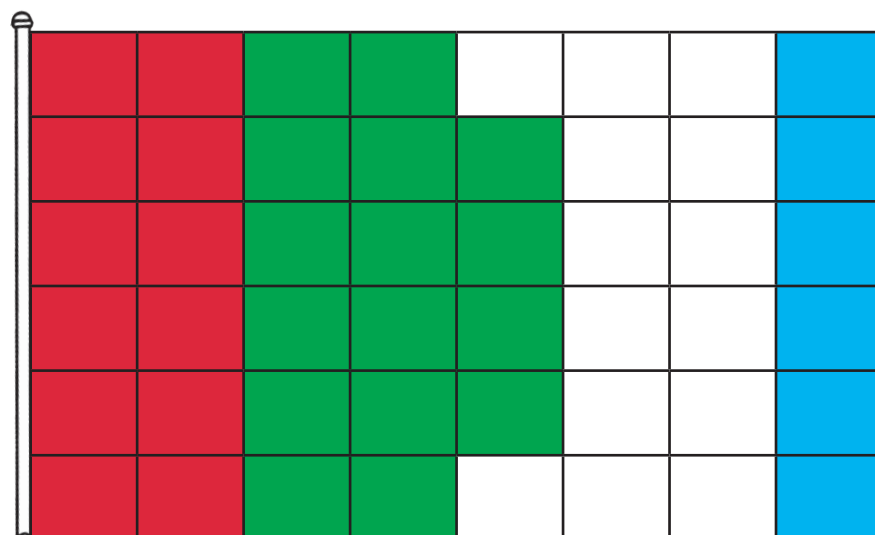
$$\text{Red} = \frac{1}{5} \quad \underline{10}$$

$$\text{Green} = \frac{3}{10} \quad \underline{15}$$

$$\text{Blue} = \frac{1}{2} \quad \underline{25}$$

What percentage is green? 30%.

What percentage is blue? 50%.



$$\text{Red} = \frac{1}{4} \quad \underline{12}$$






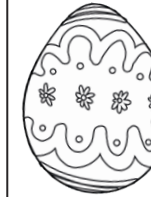
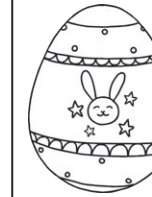
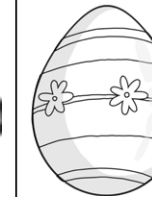
$$\text{Green} = \frac{1}{3} \quad \underline{16}$$

$$\text{Blue} = \frac{1}{8} \quad \underline{6}$$

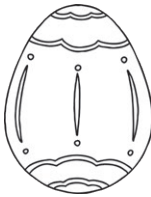


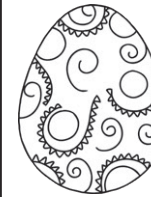
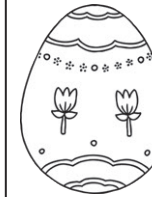

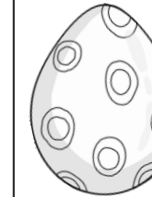
What fraction is white?  $\frac{14}{48}$  or  $\frac{7}{24}$

# Order Egg Fractions

























Here are some patterned eggs each representing a number:

							
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>

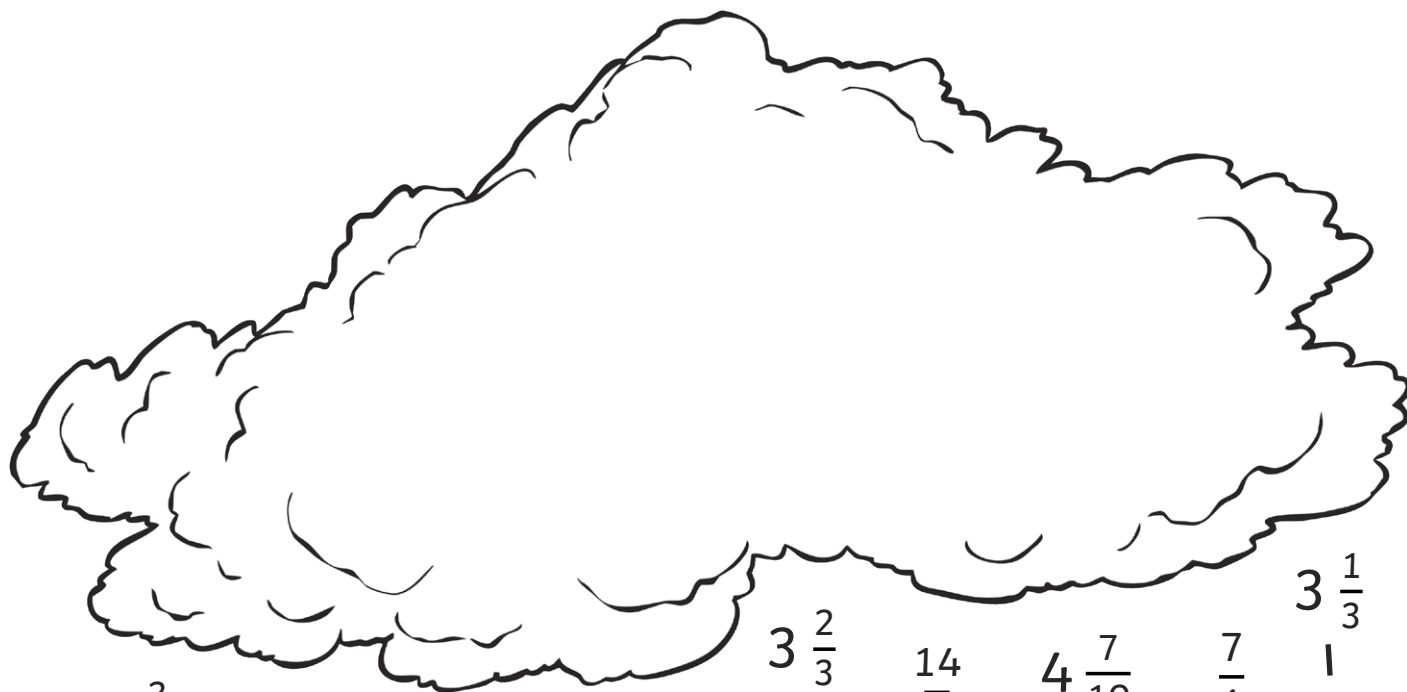
						
<b>9</b>	<b>10</b>	<b>11</b>	<b>12</b>	<b>15</b>	<b>16</b>	<b>20</b>

Use the code to find the 3 fractions in each line, and order from smallest to greatest.

 — 	 — 	 — 	$\frac{1}{3}, \frac{5}{12}, \frac{3}{6}$
 — 	 — 	 — 	$\frac{3}{8}, \frac{1}{2}, \frac{9}{16}$
 — 	 — 	 — 	$\frac{3}{20}, \frac{1}{5}, \frac{3}{10}$
 — 	 — 	 — 	$\frac{3}{4}, \frac{7}{8}, \frac{15}{16}$

# Spring Improper and Mixed Fractions

Match the improper and proper fractions to draw a spring picture.



$3\frac{3}{4}$     $17\frac{1}{6}$     $1\frac{7}{8}$     $13\frac{1}{5}$     $4\frac{1}{2}$     $3\frac{2}{3}$     $14\frac{1}{5}$     $4\frac{7}{10}$     $7\frac{1}{6}$     $3\frac{1}{3}$   
 $3\frac{1}{4}$     $2\frac{1}{6}$     $11\frac{1}{8}$     $9\frac{1}{2}$     $2\frac{3}{5}$     $11\frac{1}{3}$     $4\frac{9}{10}$     $47\frac{1}{10}$     $1\frac{5}{8}$     $15\frac{1}{6}$   
 $15\frac{1}{4}$     $2\frac{5}{6}$     $15\frac{1}{8}$     $2\frac{3}{5}$     $2\frac{4}{5}$     $1\frac{5}{6}$     $12\frac{1}{3}$     $1\frac{1}{6}$     $10\frac{1}{3}$


















# Multiply Egg Fractions

<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>

<b>9</b>	<b>10</b>	<b>11</b>	<b>12</b>	<b>15</b>	<b>16</b>	<b>20</b>

Use the egg code above and calculate the following multiplications, giving your answer as a mixed number.

 	<b>×</b>		$\frac{3}{4} \times 4 = \frac{12}{4} = 3$
 	<b>×</b>		$\frac{5}{3} \times 2 = \frac{10}{3} = 3\frac{1}{3}$
 	<b>×</b>		$\frac{12}{5} \times 3 = \frac{36}{5} = 7\frac{1}{5}$
  	<b>×</b>		$3\frac{3}{8} \times 5 = \frac{27}{8} \times 5$ $= \frac{135}{8} = 16\frac{7}{8}$
  	<b>×</b>		$1\frac{1}{3} \times 16 = \frac{4}{3} \times 16$ $= \frac{64}{3} = 21\frac{1}{3}$

# Spring Fraction Riddles

I buy some bags of eggs that each contain 24 eggs.

I use the eggs from  $\frac{3}{4}$  of the bags and hide them in the playground.

The children find most of the eggs and share them out equally. Each child gets one egg.

There are  $\frac{1}{6}$  of the hidden eggs left over.

The children come from 2 classes of 30 children.

How many bags of eggs did I buy?

**60 children have 1 egg each.**

$\frac{5}{6}$  of the hidden eggs = 60.

$\frac{1}{6}$  of the hidden eggs = 12.

$$60 + 12 = 72.$$

72					
60					12
$\frac{1}{6}$	$\frac{1}{6}$	$\frac{1}{6}$	$\frac{1}{6}$	$\frac{1}{6}$	$\frac{1}{6}$

72 is  $\frac{3}{4}$  of the overall eggs so 24 is  $\frac{1}{4}$ .

$$72 + 24 = 96.$$

96			
72			24
$\frac{1}{4}$	$\frac{1}{4}$	$\frac{1}{4}$	$\frac{1}{4}$

$$4 \times 24 = 96.$$

96			
24	24	24	24

**I bought 4 bags of eggs.**

# Spring Fraction Riddles

I buy some bunches of tulips of different colours.

$\frac{1}{6}$  of the bunches are red tulips.

$\frac{1}{4}$  of the bunches are yellow tulips.

$\frac{1}{3}$  of the bunches are blue tulips.

There are 6 other bunches.

How many bunches of tulips did I buy?

**Change each fraction so they have the common denominator of 12:**

$$\frac{1}{6} = \frac{2}{12}$$

$$\frac{1}{4} = \frac{3}{12}$$

$$\frac{1}{3} = \frac{4}{12}$$

**Add up the numerators to see what fraction the other bunches are:**

$$2 + 3 + 4 = 9$$

$$6 \text{ bunches} = \frac{9}{12}$$

12			
2	3	4	3

**Therefore:**

$$\frac{2}{12} = 4 \text{ red bunches}$$

$$\frac{3}{12} = 6 \text{ yellow bunches}$$

$$\frac{4}{12} = 8 \text{ blue bunches}$$

$$6 + 4 + 6 + 8 = 24 \text{ bunches}$$

**I bought 24 bunches of flowers.**