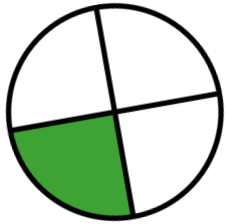
Sense of Number
Visual Fractions Policy



Blanford Mere Primary School
October 2014

by Dave Godfrey & Anthony Reddy

‘A picture is worth 1000 words!’

www.senseofnumber.co.uk

1/4

Guide to using a 1/4 Visual Fractions Policy

The Sense of Number Visual Fractions Policy provides a visual representation of the progression found within Domain 4: Fractions in the new National Curriculum.

A school branded VFP is created by Dave Godfrey for individual schools when the school logo and school name are added to the footer of each slide.

Typical uses:

Classroom: The slides are printed out (e.g. A4) and the appropriate slides are displayed within each classroom for continual reference or on a working wall.

Teacher Reference: The slides are printed out (e.g. 9 slides per A4 page) and inserted in the teacher's planning folder.

Parents: The slides are used to communicate to parents the school's approach to teaching fractions.

Website: Selected slides from the VFP are inserted onto a school's maths webpages. (Please note: the VFP should not be made available for download.)

Sections in the 1/4 Visual Fractions Policy

1-4 Introduction Slides
5-15 General Fractions Slides: Vocab, Defining, Types, 1 Whole, Walls etc.

Pages	Code	Years	Theme
16-23	FA	Y2-Y6	Counting in Fractions
24-27	FB	Y2-Y5	Fractions as a Number
28-36	FC	Y1-Y3	Recognising and naming Unit & Non-Unit Fractions
37-40	FD	Y3-Y5	Ordering Fractions
41-47	FE	FS-Y5	Finding and naming a Fraction of a Quantity
48-61	FF	Y1-Y6	Equivalent Fractions
62-65	FG	Y3-Y6	Decimal/Fraction/Percentage Equivalences
66-76	FH	Y2-Y6	Common FDP Equivalences & FDP Walls
77-91	FI	Y2-Y6	Fractions to 1
92-95	FJ	Y2-Y5	Fractions Greater than 1
96-116	FK	Y1-Y6	Calculating with Fractions (+, -, x, ÷)
117-123	FL	Y3-Y6	Division as a Fraction
124-125	FM	Y5-Y6	Jump! and Remainders

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Year Group

$\frac{1}{4}$

Specific Slide Locations

Section	FS	Y1	Y2	Y3	Y4	Y5	Y6
FA: Counting			16,17	18,19	20,21	22,23	
FB: Number			24	25	26	27	
FC: Recognising		28,29	30,31	32-35	36		
FD: Ordering				37,38		39,40	
FE: Quantity	41	42,43	44	45	46	47	
FF: Equivalence			48-50	51-54	55-59	60	61
FG: FDP Equiv.				62	63	64,65	
FH: Common FDP					66	67-70	71-76
FI: Fractions to 1			77,78	79-83	84-88	89,90	91
FJ: > 1			92	93	94	95	
FK: Addition		96	97	98	99	100	101,102
FK: Subtraction				103	104	105	106,107
FK: Multiplication						108,109	110,111
FK: Division						112,113	114-116
FL: Div. as a Fractn.				117	118,119	120,121	122,123
FM: Extras						124	125

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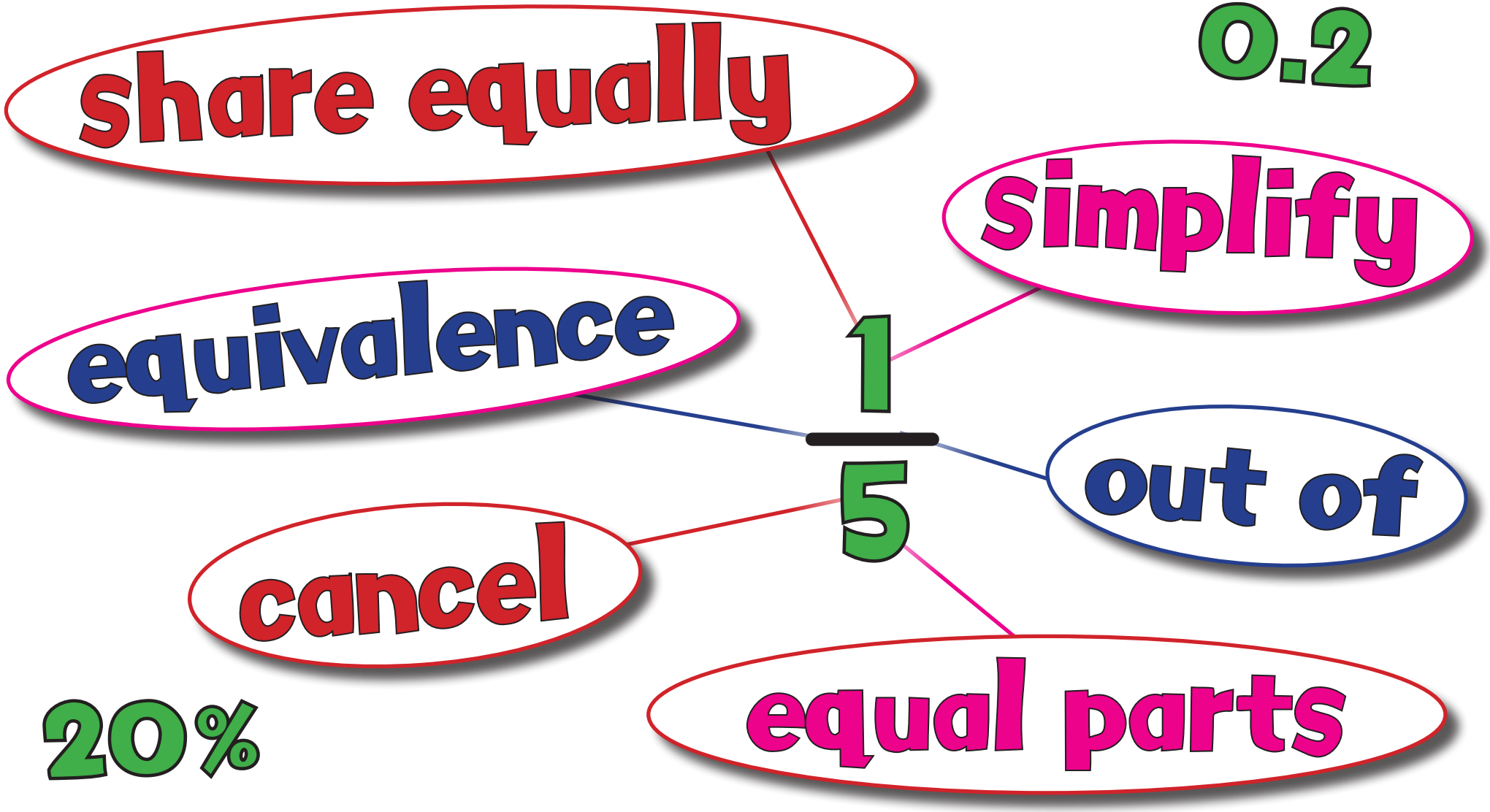
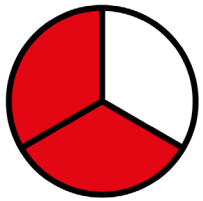
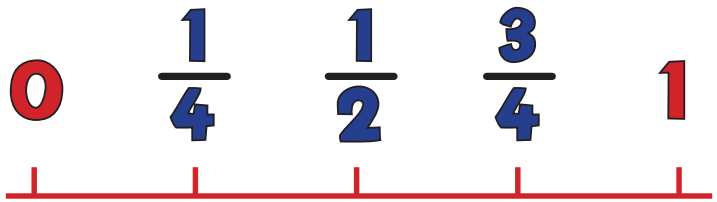
Fractions Vocabulary



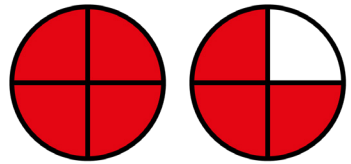
Defining a Fraction

$\frac{2}{3}$ 

Equal Parts of a Whole



A Number

$\frac{7}{4}$ 

More than a Whole

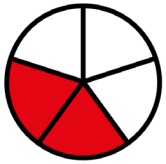
$\frac{1}{5} = 1 \div 5$

A Division

$\frac{1}{4}$ of 16

A Fraction of an Amount

$\frac{2}{5} = 40\%$

$= 0.4$ 

An Equivalence

Parts of a Fraction

$$\frac{1}{4}$$

1 — Numerator

4 — Denominator

"Fractions is sharing equally"

Fraction Bar (Vinculum)

Types of Fractions

Unit Fraction

$\frac{1}{5}$

(Numerator = 1)

Non-unit Fraction

$\frac{3}{5}$

(Numerator > 1)

Proper Fraction

$\frac{2}{5}$ or $\frac{4}{5}$

(Numerator < Denominator)

Improper Fraction

$\frac{8}{5}$ or $\frac{12}{5}$

(Numerator > Denominator)

Mixed Fraction

$1\frac{3}{5}$

(Whole number + Proper Fraction)

Vulgar Fraction

$\frac{4}{5}$ or $\frac{8}{5}$

(Proper or Improper Fraction)

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Naming a Fraction

If the numerator is 1, the denominator is 10, then the name of my fraction is one tenth.

$\frac{1}{10}$

$\frac{1}{2}$ One half

$\frac{1}{6}$ One sixth

$\frac{3}{4}$ Three quarters

$\frac{5}{5}$ Five fifths - One Whole!

$\frac{7}{3}$ Seven thirds

$\frac{27}{32}$ Twenty-seven thirty-seconds

Note: The denominator is said as an ordinal number (except halves and quarters!)

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Fraction Wall

(1/2)

$\frac{1}{3}$	$\frac{3}{8}$	$\frac{4}{4}$	$\frac{3}{2}$	$\frac{7}{10}$	$\frac{7}{8}$
$\frac{3}{4}$	$\frac{1}{4}$	$\frac{5}{9}$	$\frac{1}{2}$	$\frac{2}{2}$	$\frac{9}{2}$
$\frac{7}{10}$	$\frac{2}{4}$	$\frac{1}{9}$	$\frac{7}{4}$	$\frac{3}{8}$	$\frac{5}{5}$

Fraction Wall

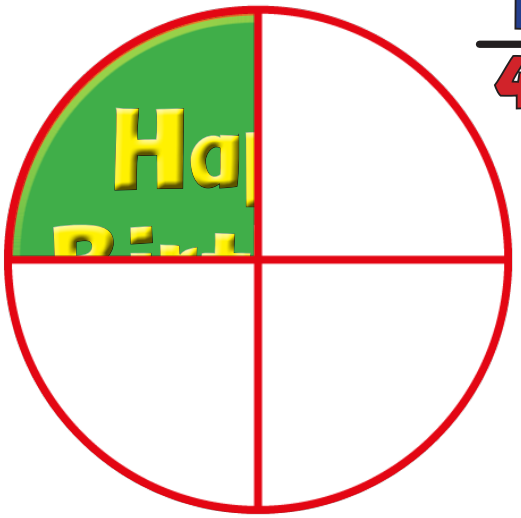
(2/2)

$\frac{2}{3}$	$\frac{9}{8}$	$\frac{1}{91}$	$\frac{5}{2}$	$\frac{30}{10}$	$\frac{8}{32}$
$\frac{3}{7}$	$\frac{8}{12}$	$\frac{5}{19}$	$\frac{14}{14}$	$\frac{31}{5}$	$\frac{17}{2}$
$\frac{7}{15}$	$\frac{2}{6}$	$\frac{11}{3}$	$\frac{12}{4}$	$\frac{3}{8}$	$\frac{9}{9}$

A Fraction of a Whole

$\frac{1}{2}$

$\frac{1}{4}$



1 whole cake!

$\frac{5}{16}$

$\frac{3}{8}$

Fractions: 1 Whole

1 whole pack of 6 cans

1

1

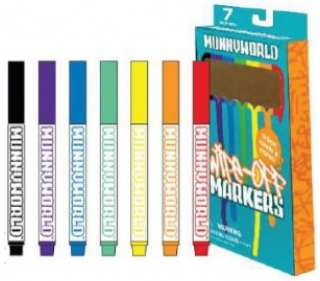
(1 whole)

1

1 whole box of 12 eggs

1 whole pack of 4 balls

1



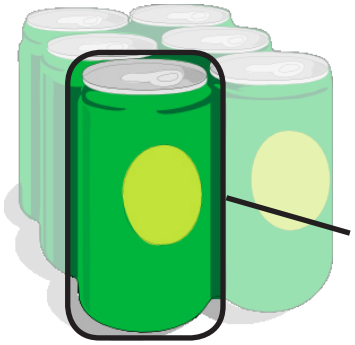
1

1 whole pack of 7 pens

1

1 whole bunch of 5 bananas

A Fraction of a Whole

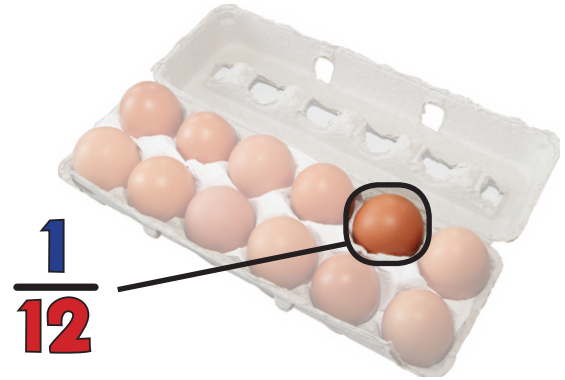


$\frac{1}{6}$

1 can from the whole pack of 6 cans

$\frac{?}{?}$

(A fraction of a whole)



$\frac{1}{12}$

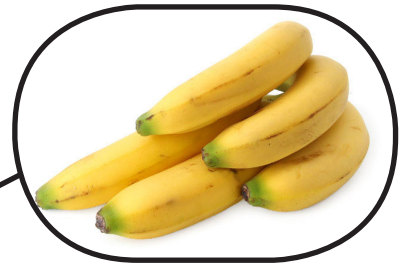
1 egg from the whole box of 12 eggs

$\frac{2}{4}$

2 balls from the whole pack of 4 balls

$\frac{3}{7}$

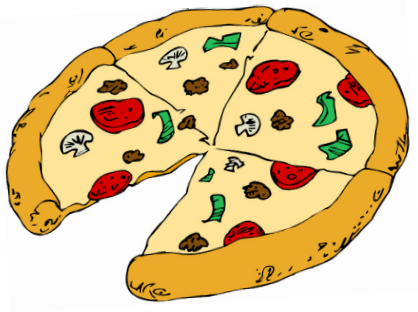
3 pens from the whole pack of 7 pens

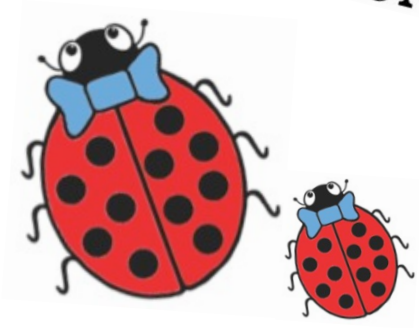


$\frac{5}{5}$

5 bananas from the whole bunch of 5 bananas

Fractions are Everywhere!

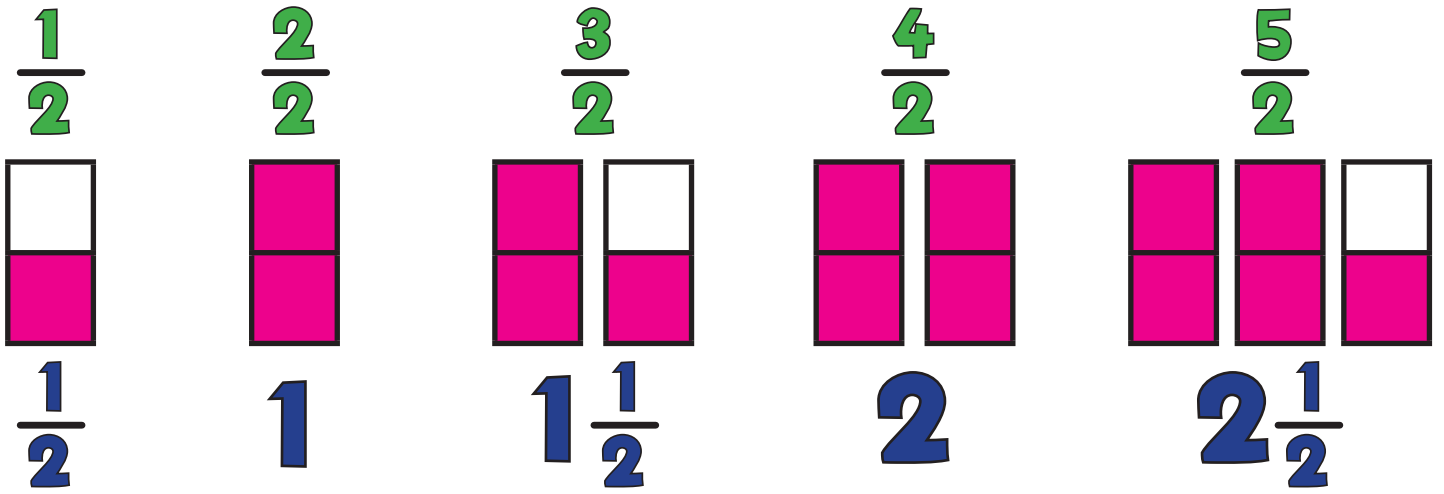


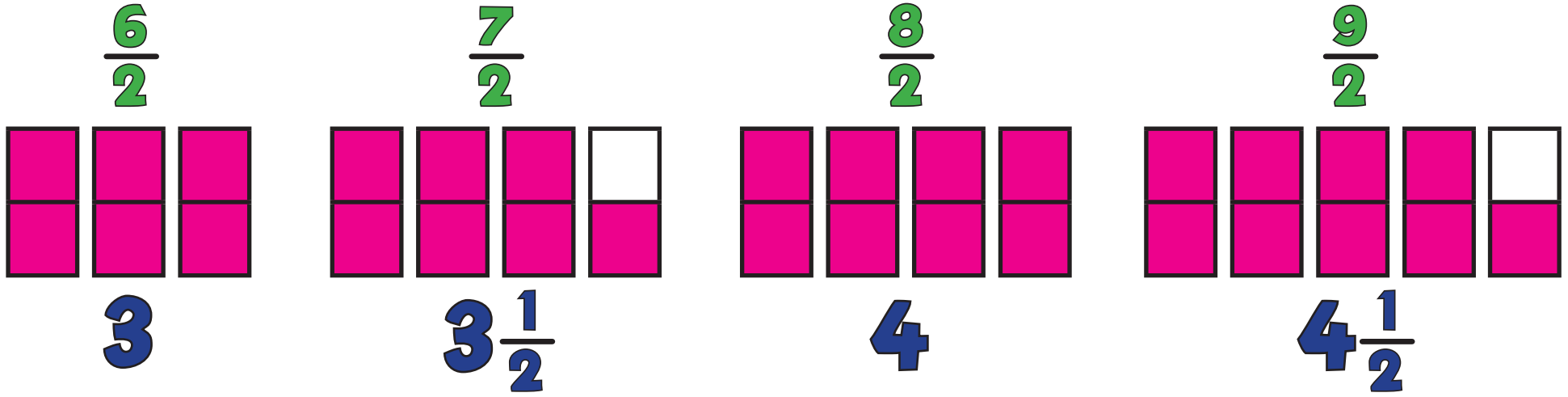


FA: Counting in Fractions

2a

$\frac{1}{2}$

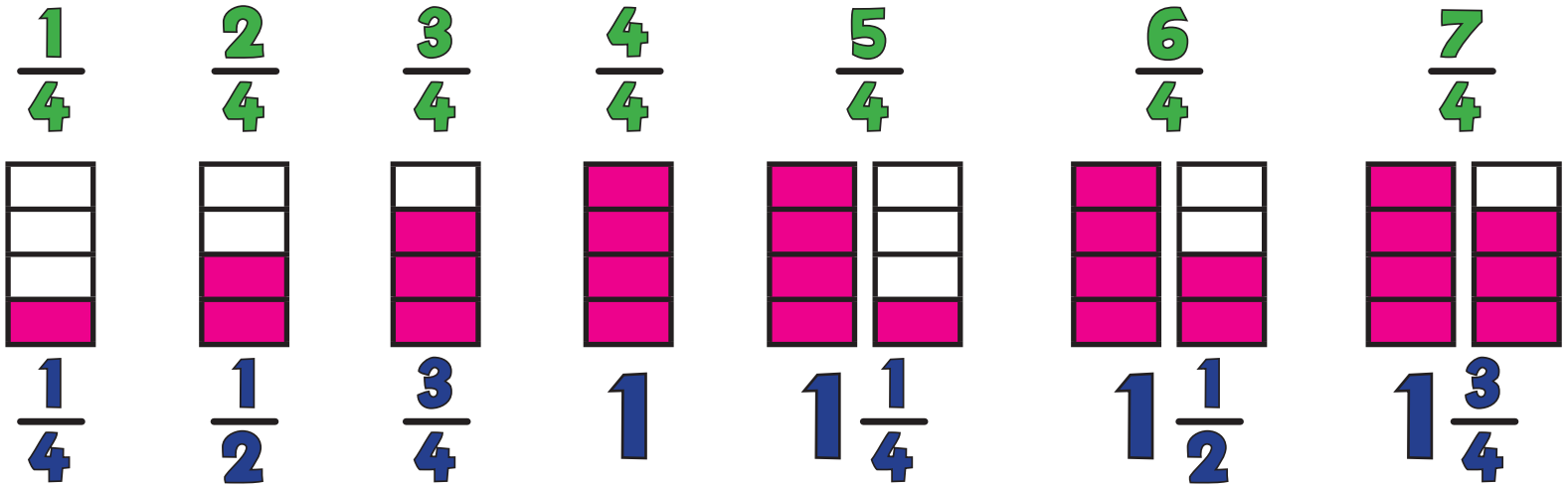


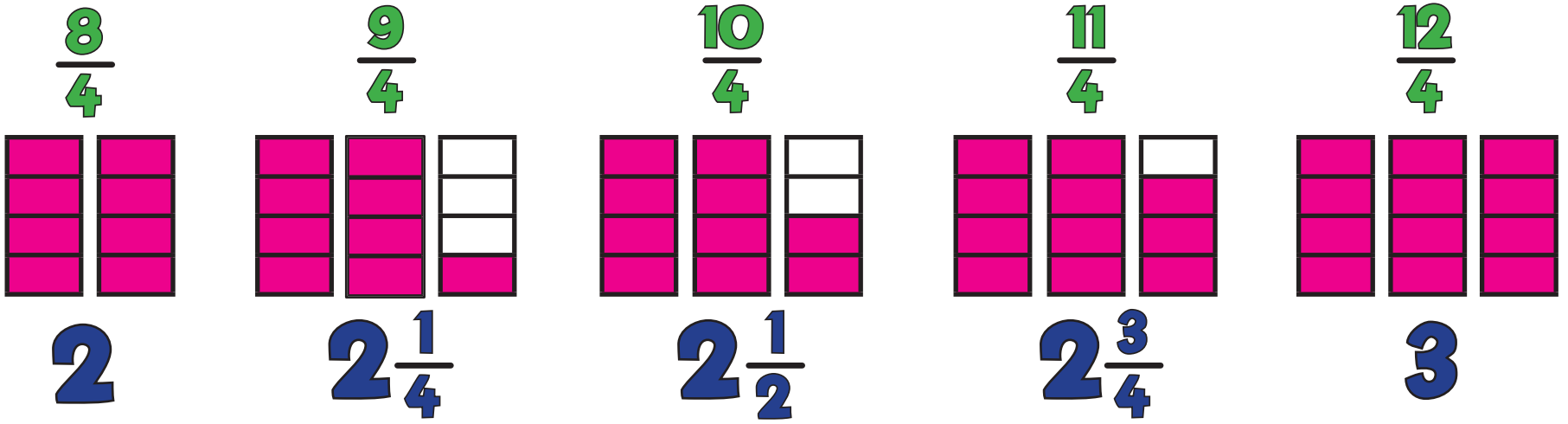


FA: Counting in Fractions

2b

$\frac{1}{4}$

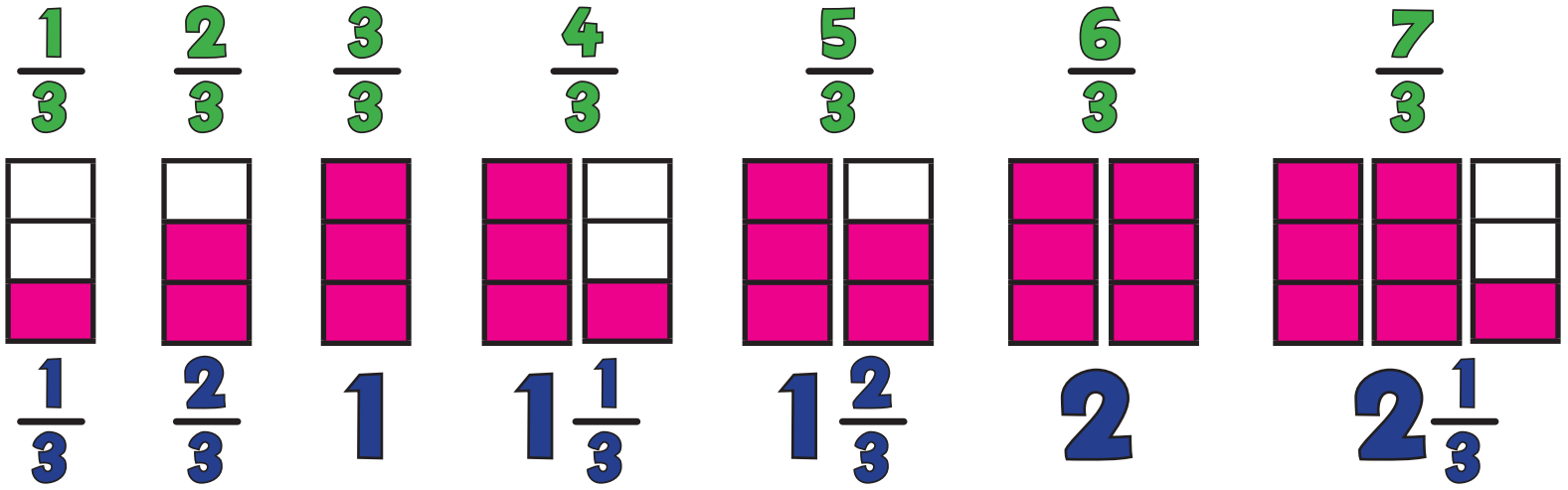


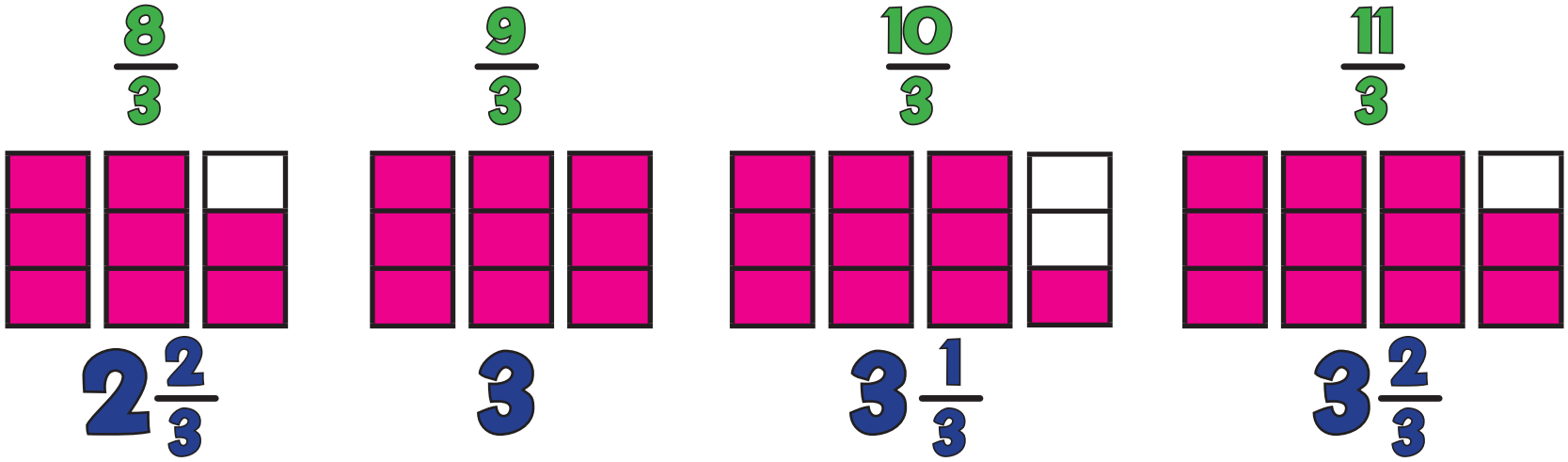


FA: Counting in Fractions

3a

$\frac{1}{3}$

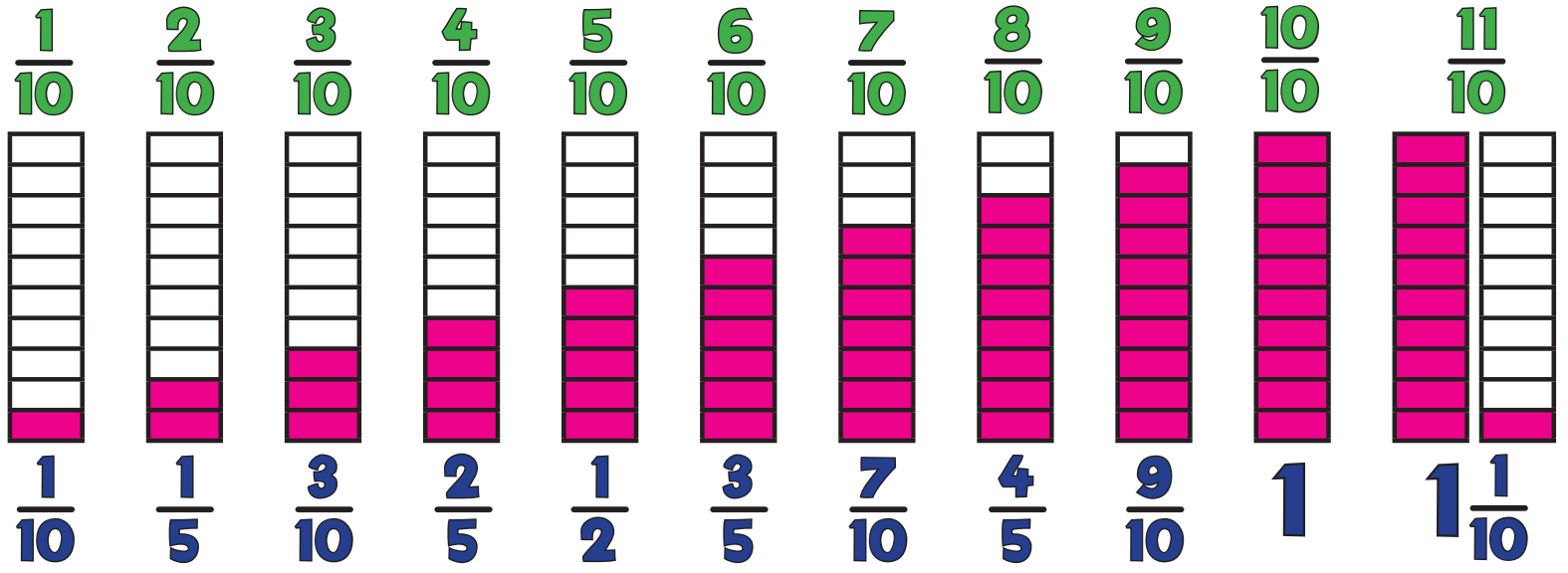


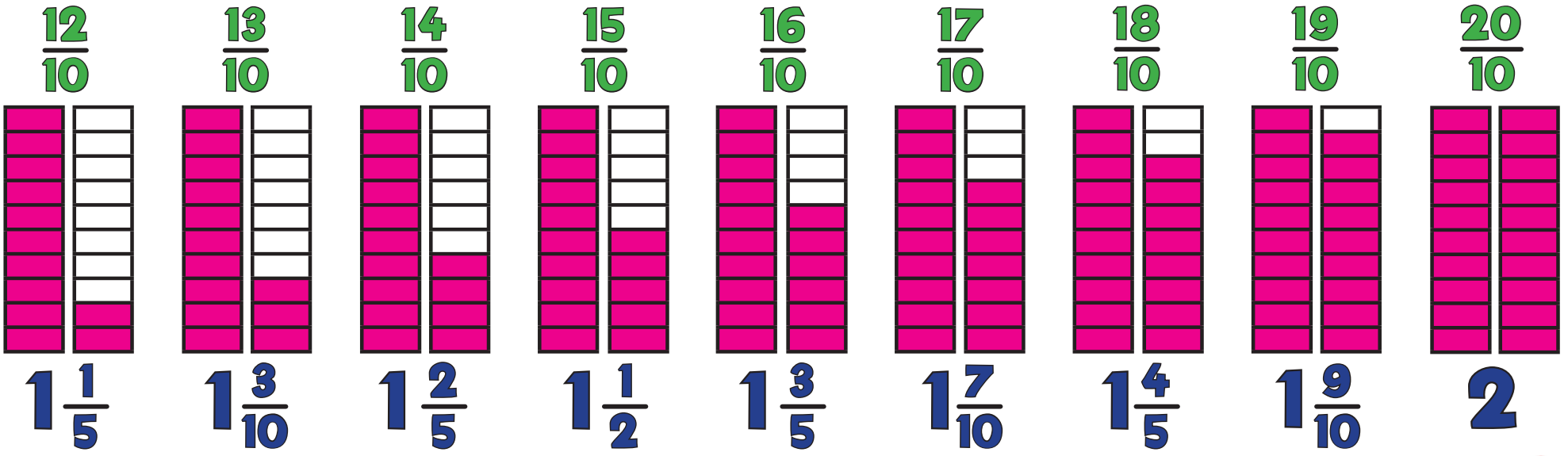


FA: Counting in Fraction

3b

$\frac{1}{10}$

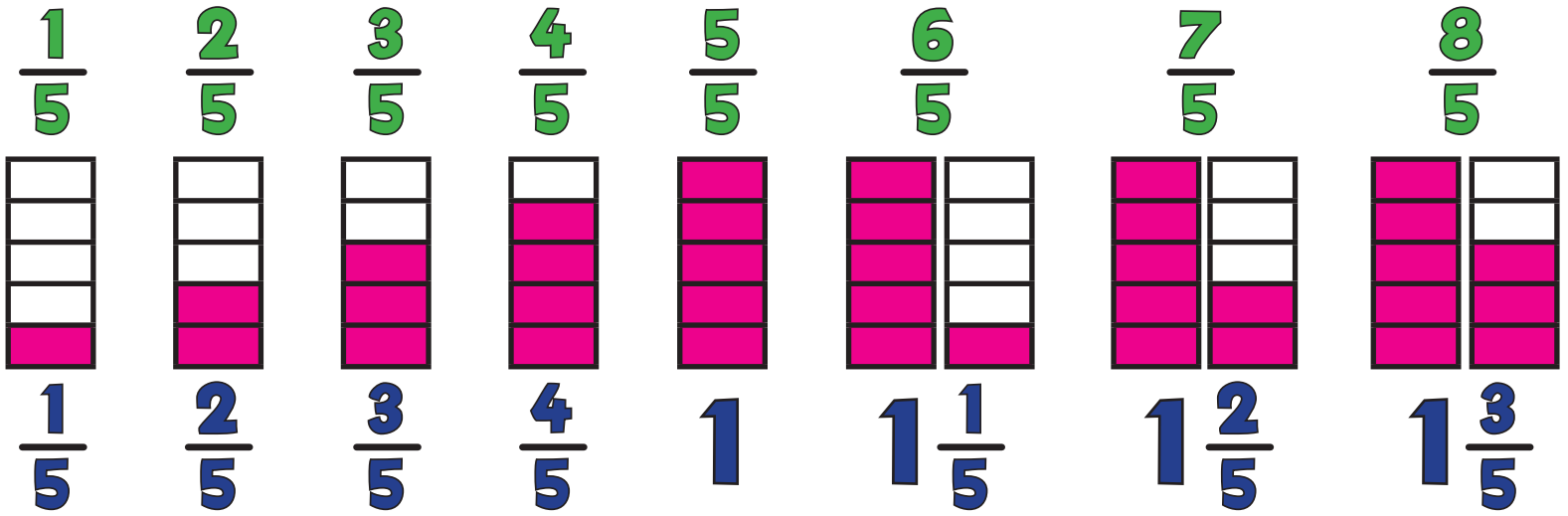


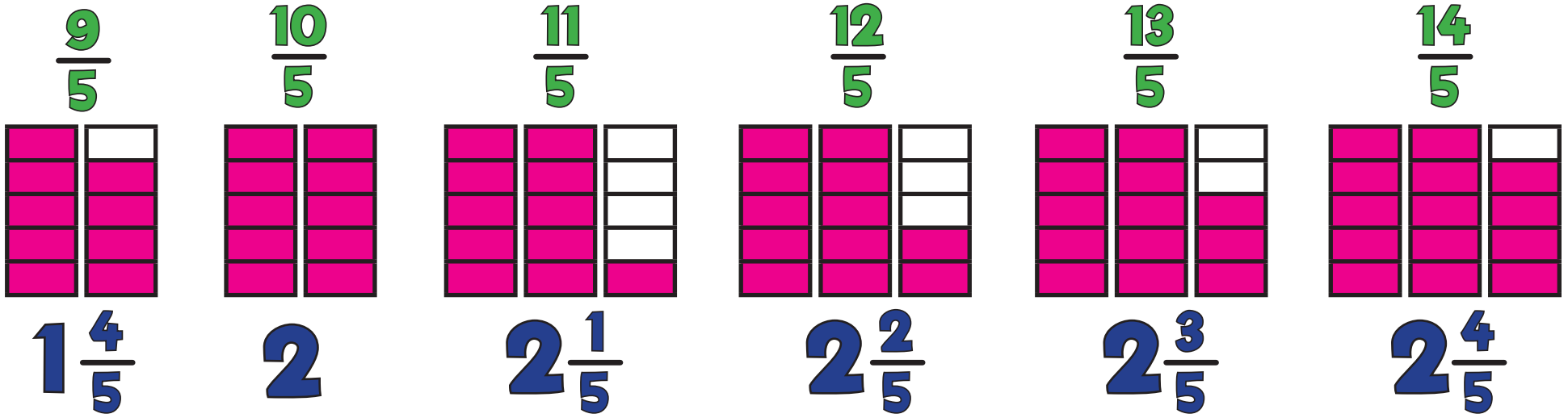


FA: Counting in Fractions

4a

$\frac{1}{5}$

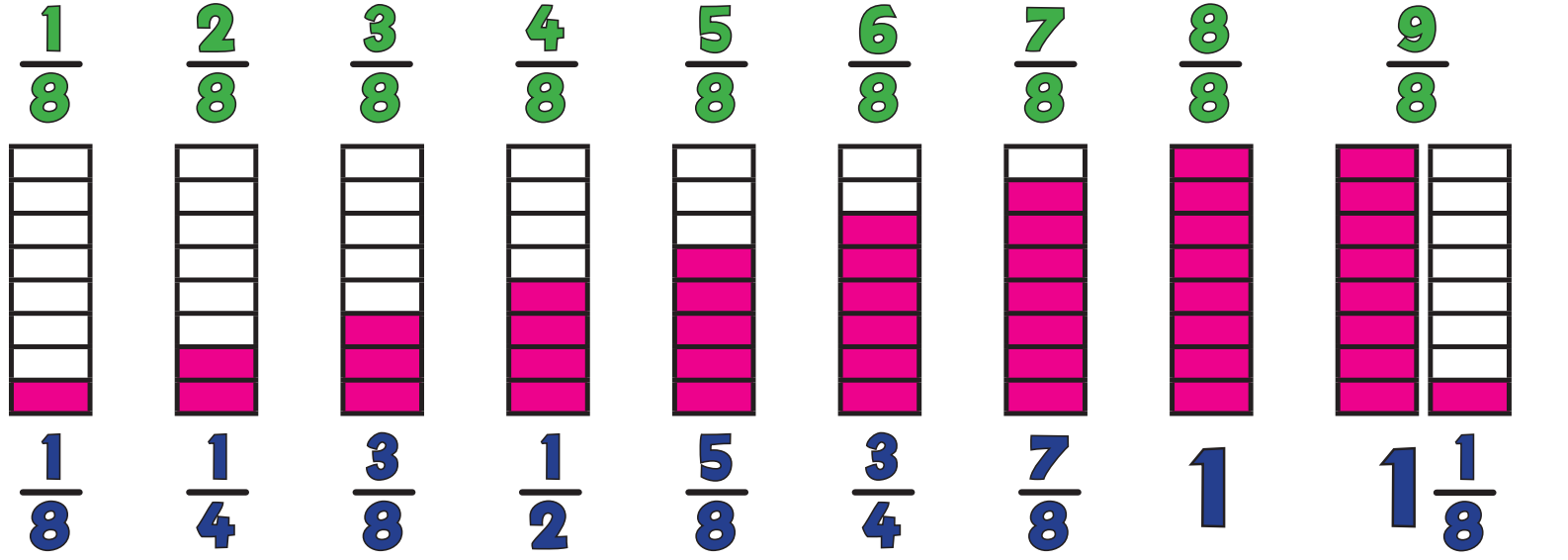


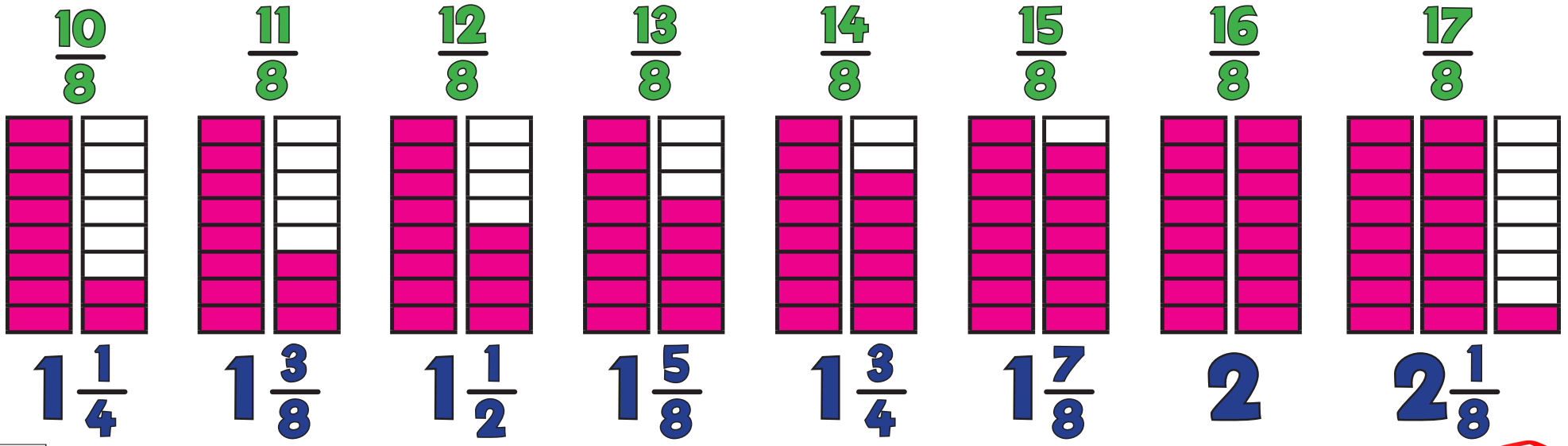


FA: Counting in Fractions

4b

$\frac{1}{8}$

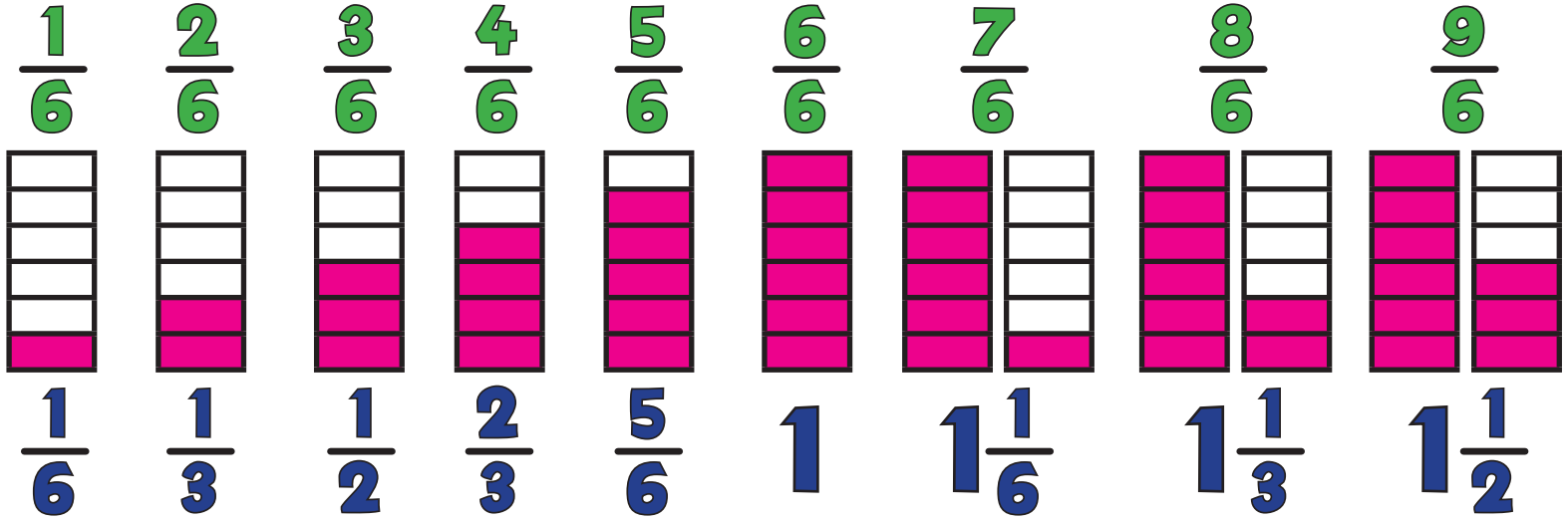




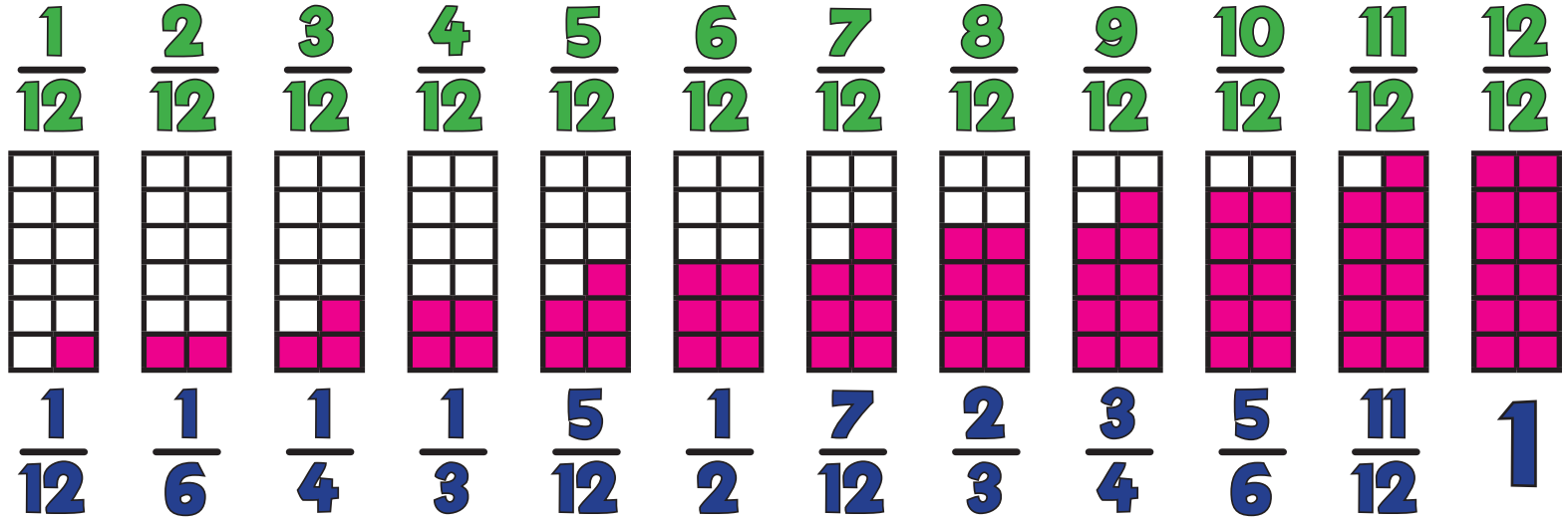
FA: Counting in Fractions

5a

$\frac{1}{6}$



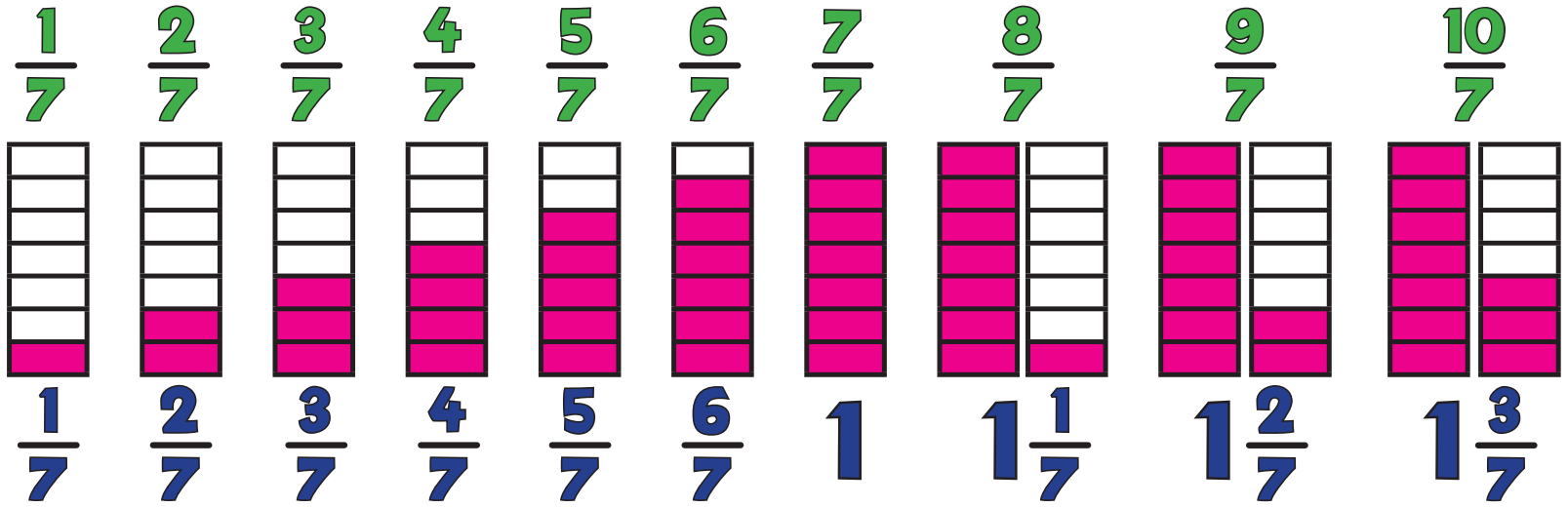
$\frac{1}{12}$



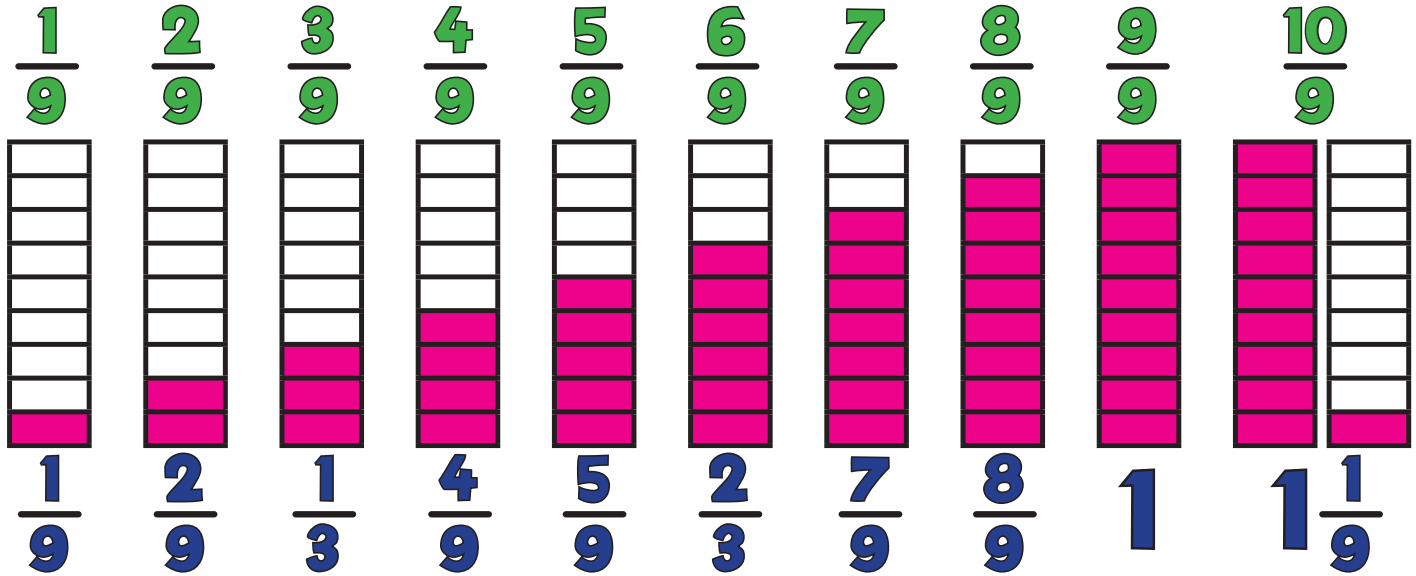
FA: Counting in Fractions

5b

$\frac{1}{7}$

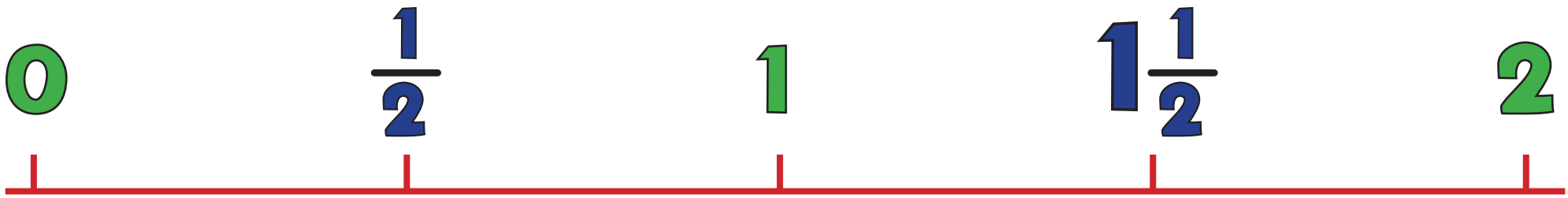


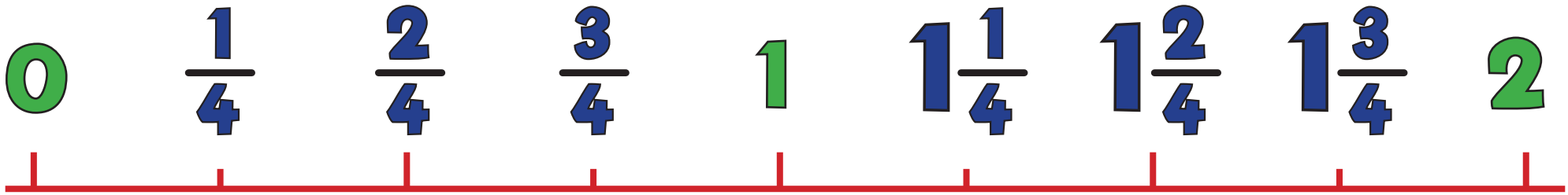
$\frac{1}{9}$



FB: Fractions as a Number

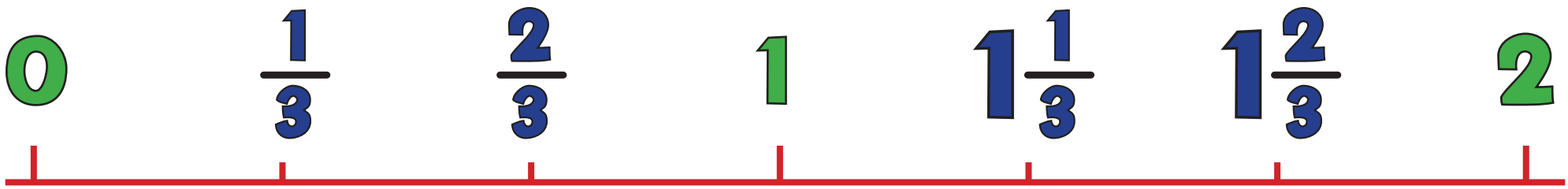
2

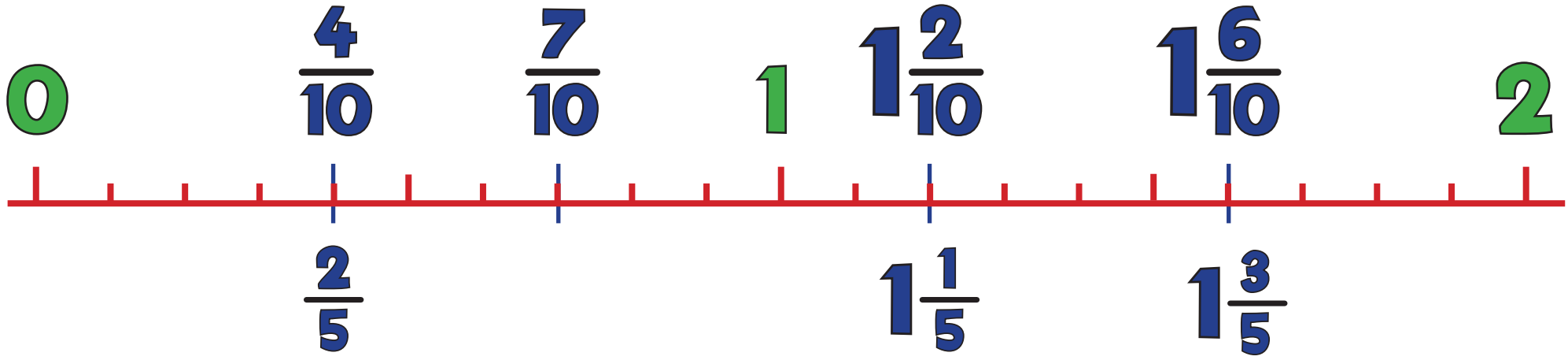




FB: Fractions as a Number

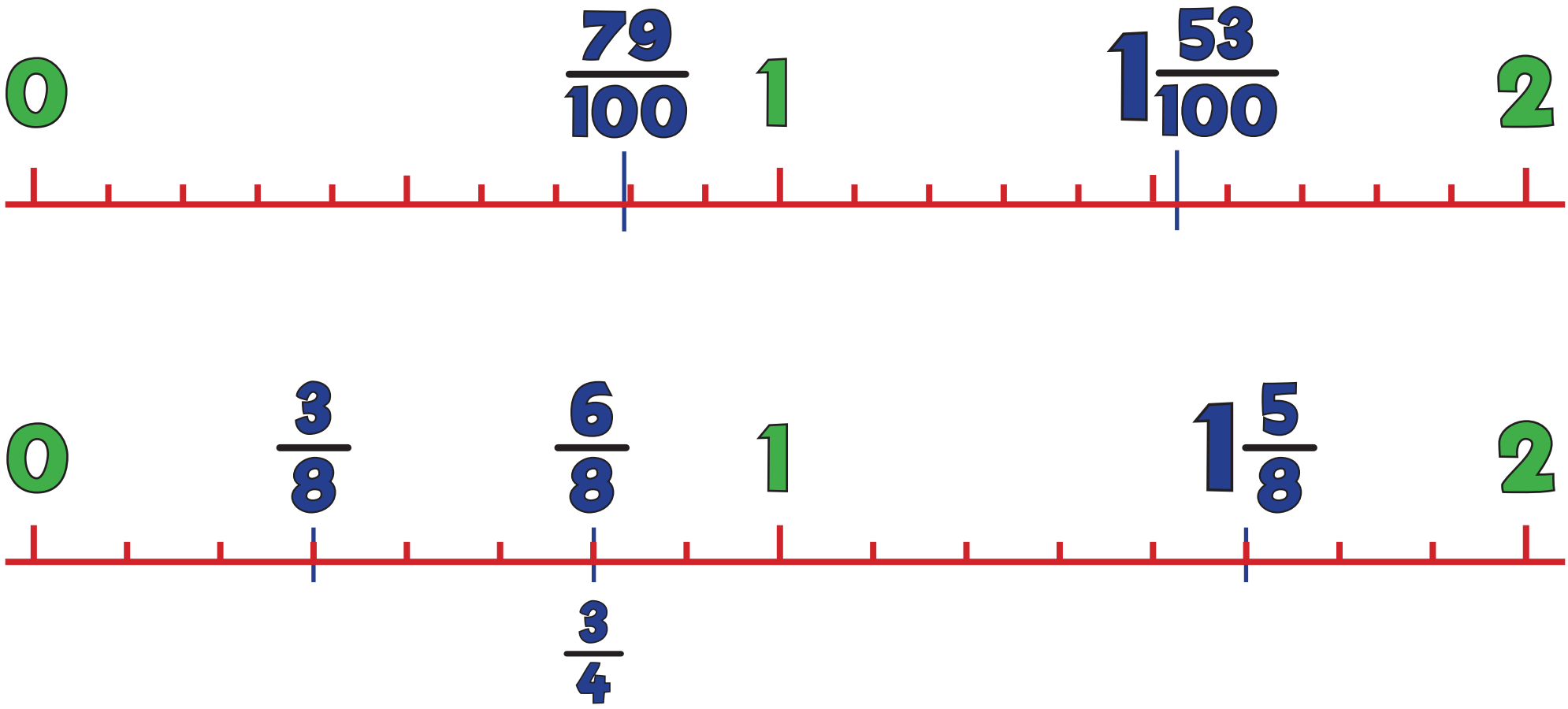
3





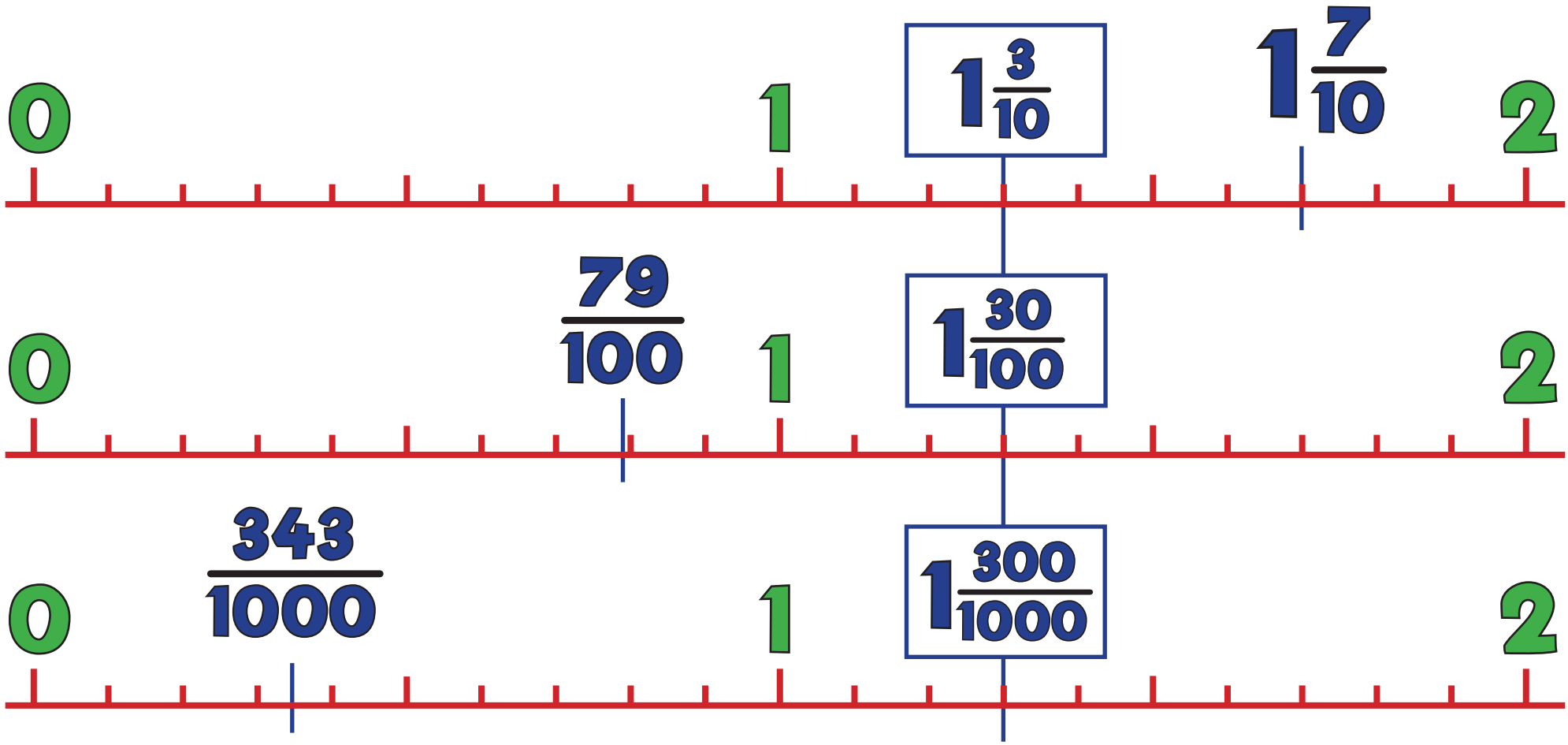
FB: Fractions as a Number

4



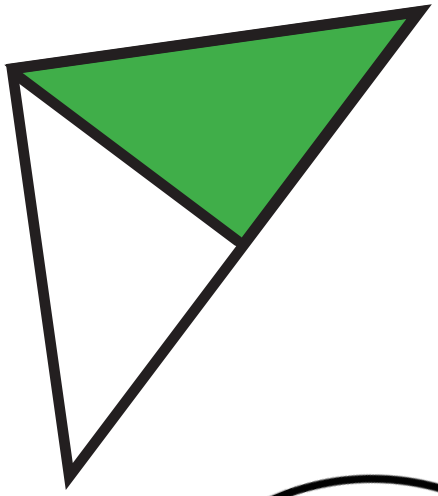
FB: Fractions as a Number

5

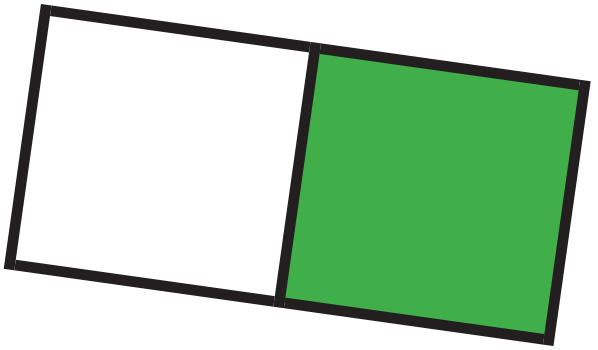


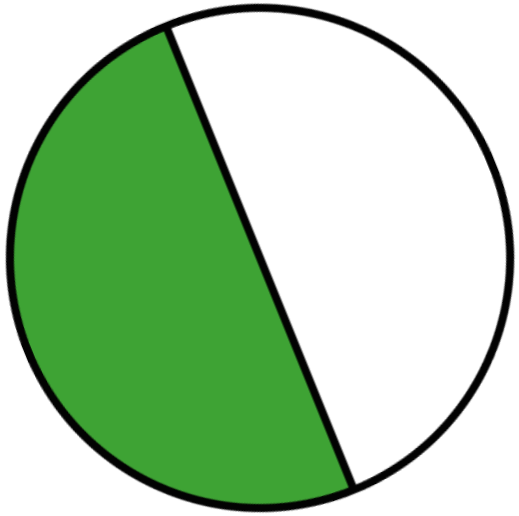
FC: Recognising Fractions

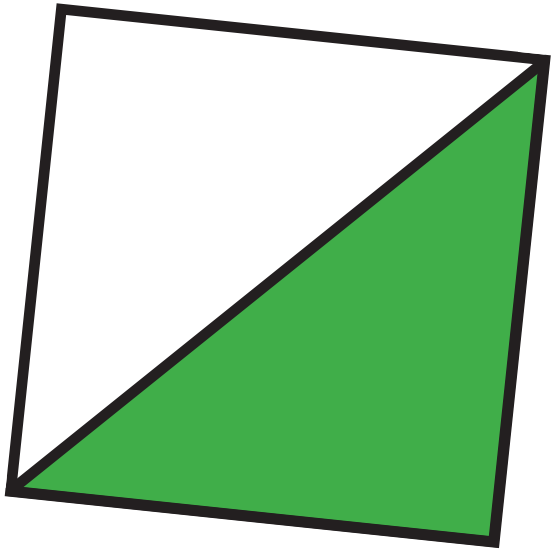
1a



$\frac{1}{2}$

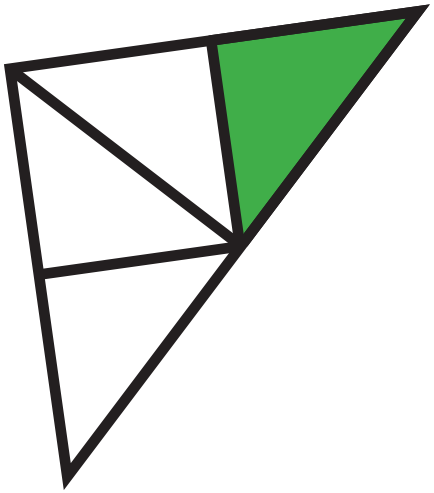






FC: Recognising Fractions

1b



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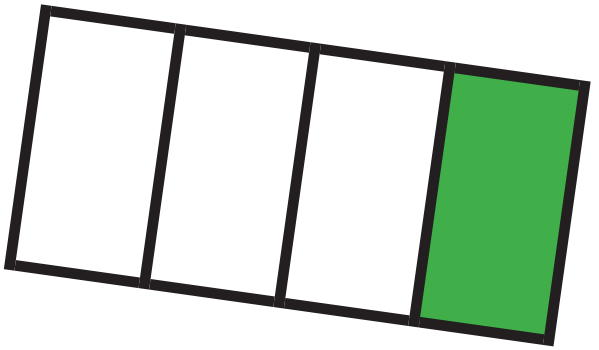
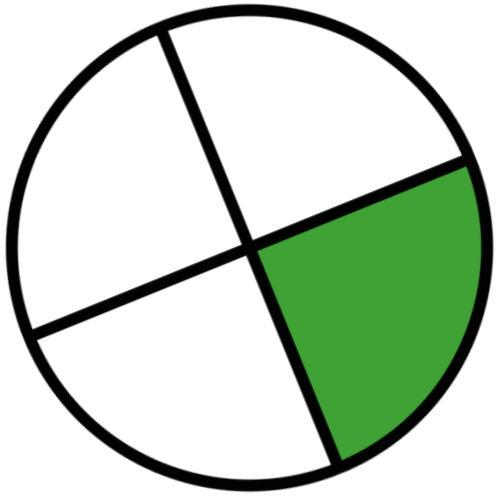
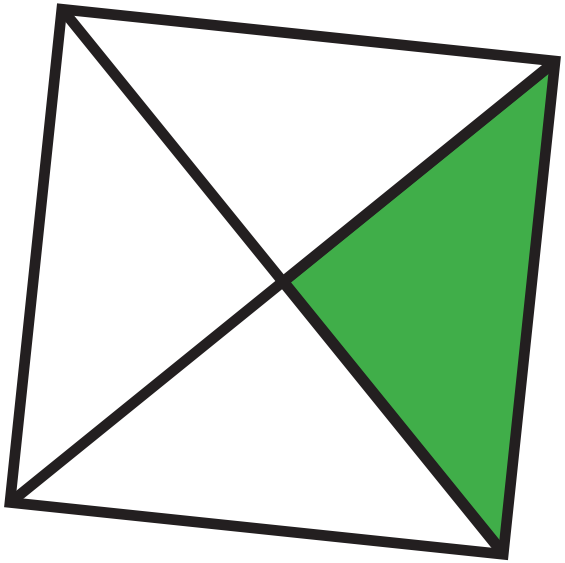
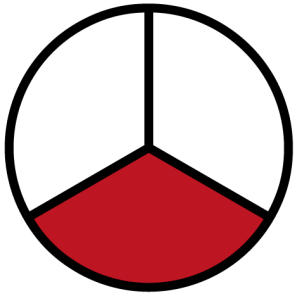




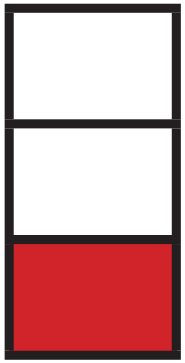


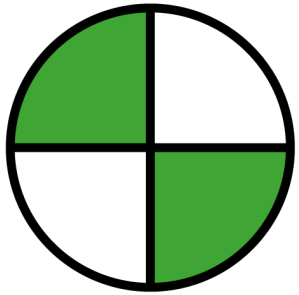
FC: Recognising Fractions

2a

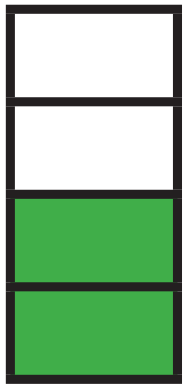


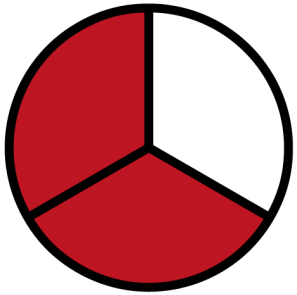
$\frac{1}{3}$



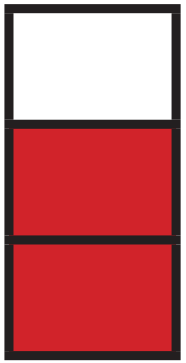


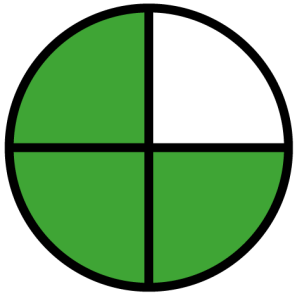
$\frac{2}{4}$



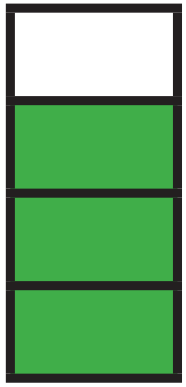


$\frac{2}{3}$



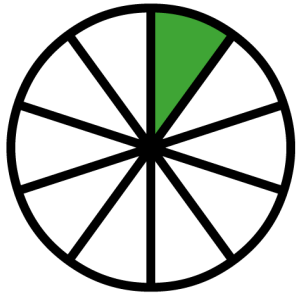


$\frac{3}{4}$

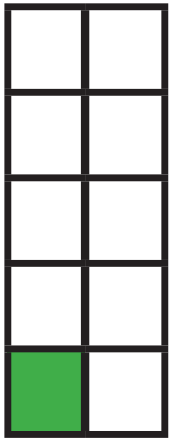


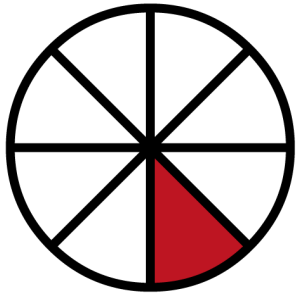
FC: Recognising Fractions

2b

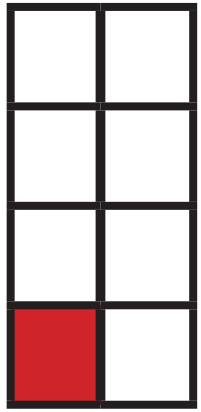


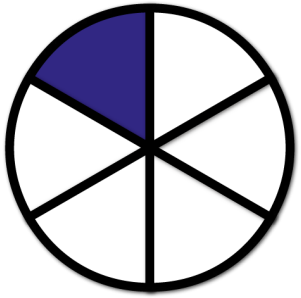
$\frac{1}{10}$



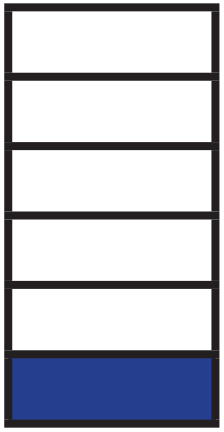


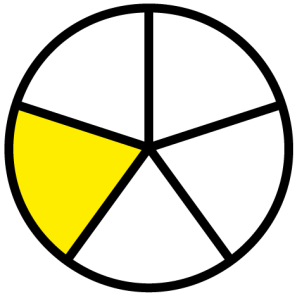
$\frac{1}{8}$



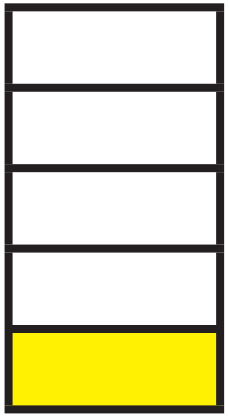


$\frac{1}{6}$



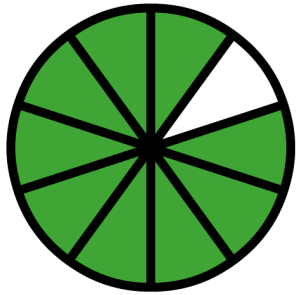


$\frac{1}{5}$

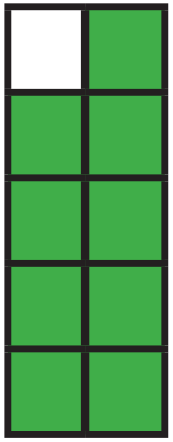


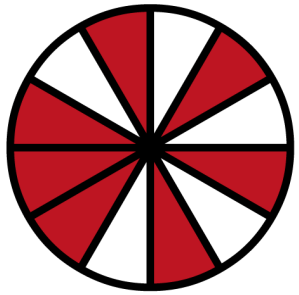
FC: Recognising Fractions

3a

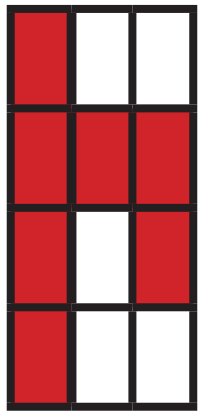


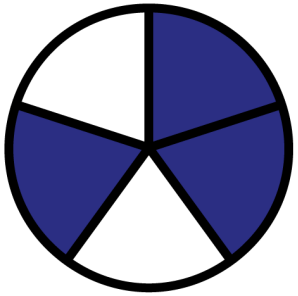
$\frac{9}{10}$



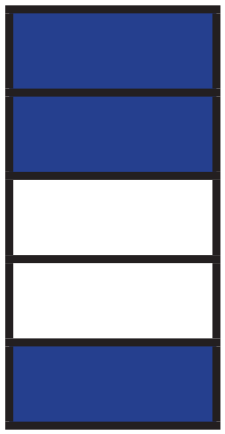


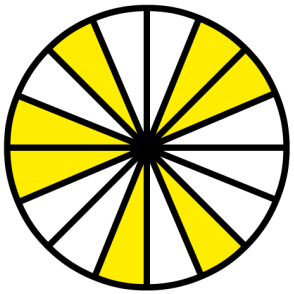
$\frac{7}{12}$



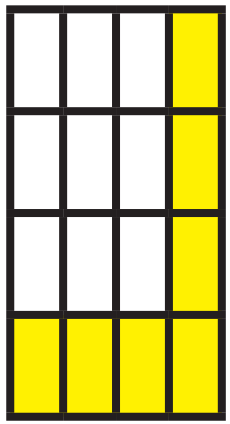


$\frac{3}{5}$



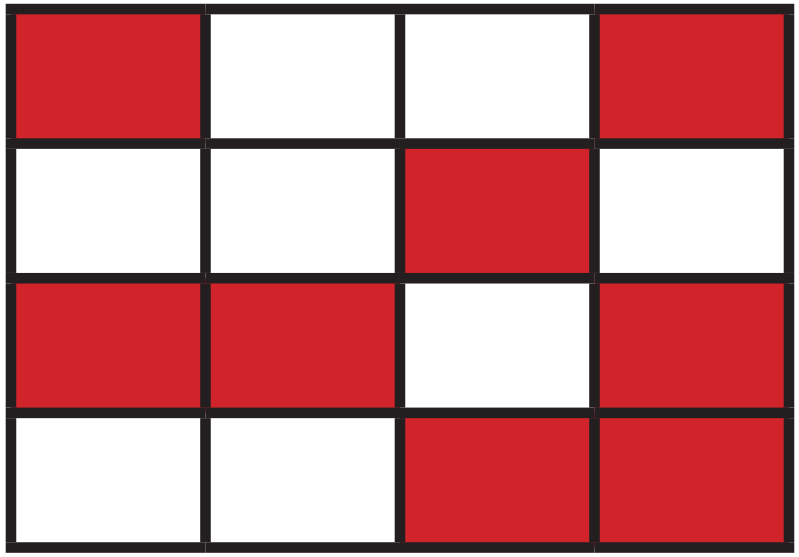


$\frac{7}{16}$

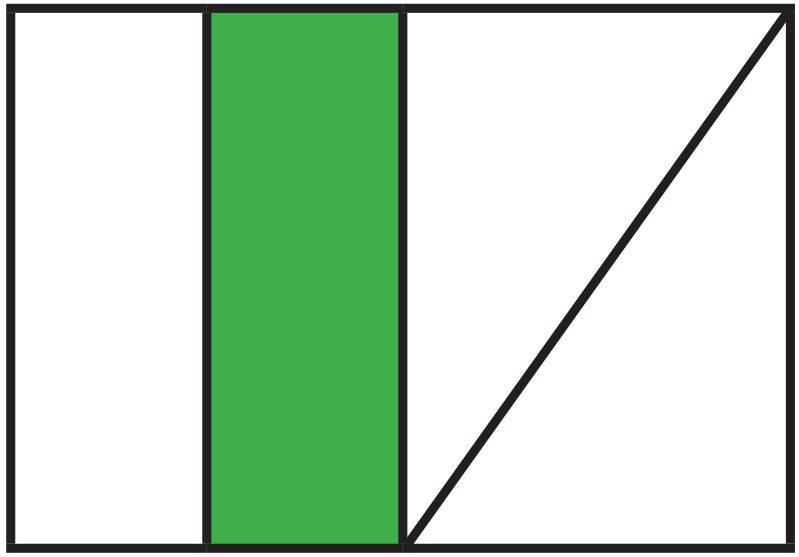


FC: Recognising Fractions

3b



$\frac{1}{2}$



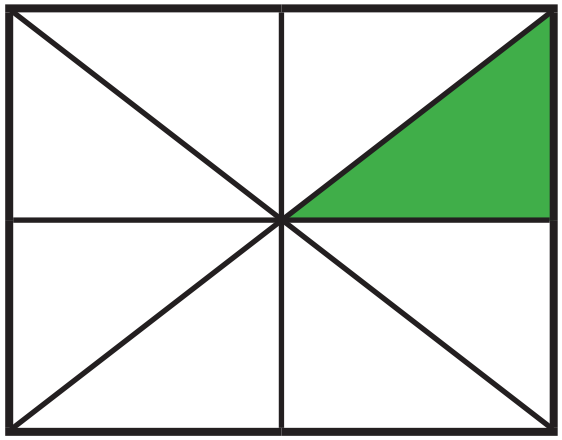
$\frac{1}{4}$

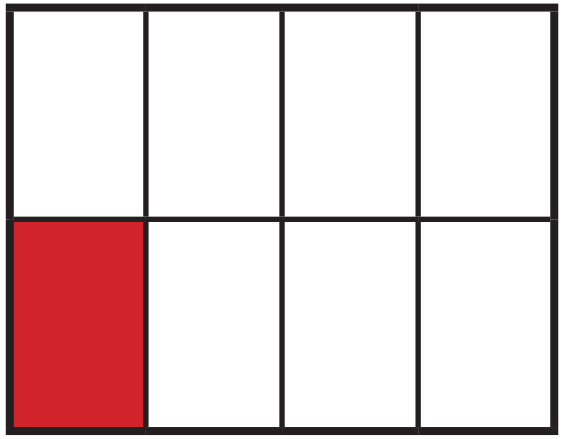
FC: Recognising Fractions

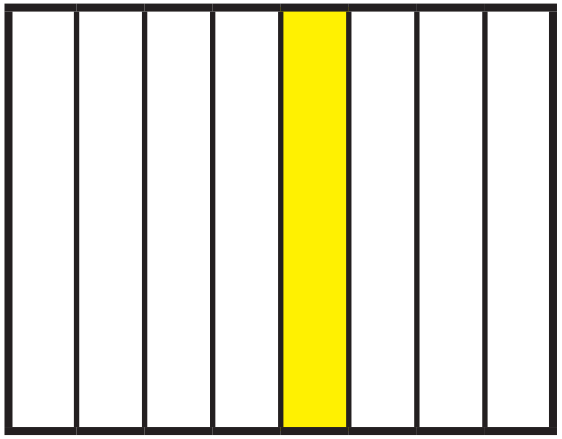
3c

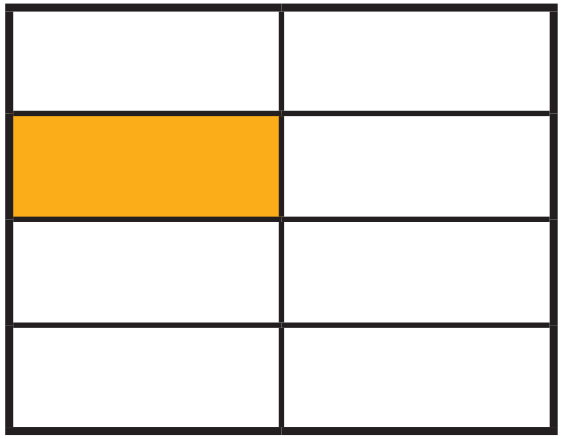
Eight Equal Eighths!

$$\frac{1}{8}$$



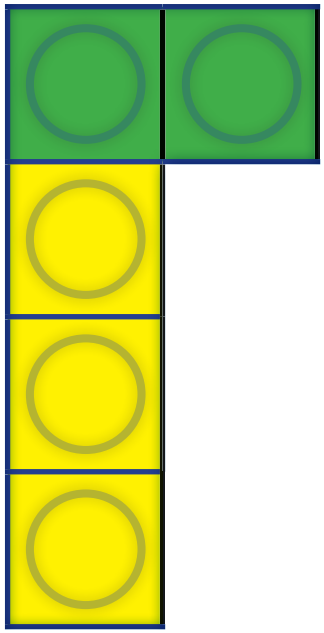




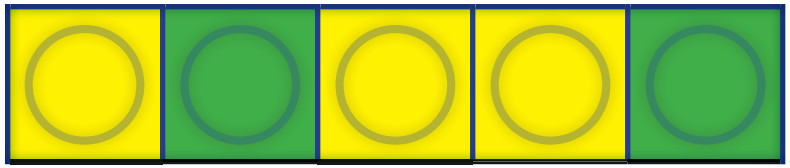


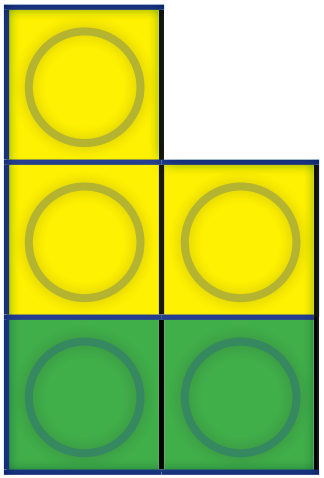
FC: Recognising Fractions

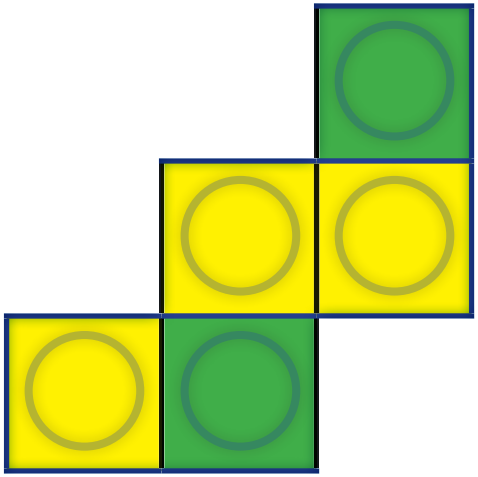
3d



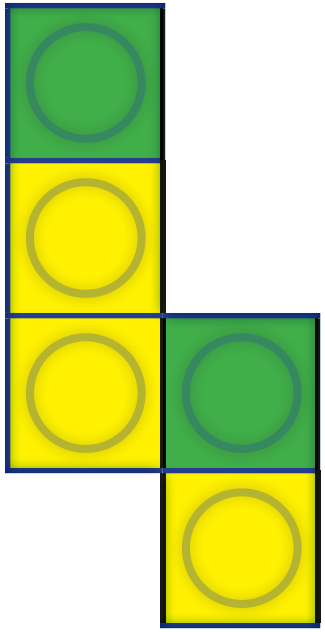
$\frac{2}{5}$





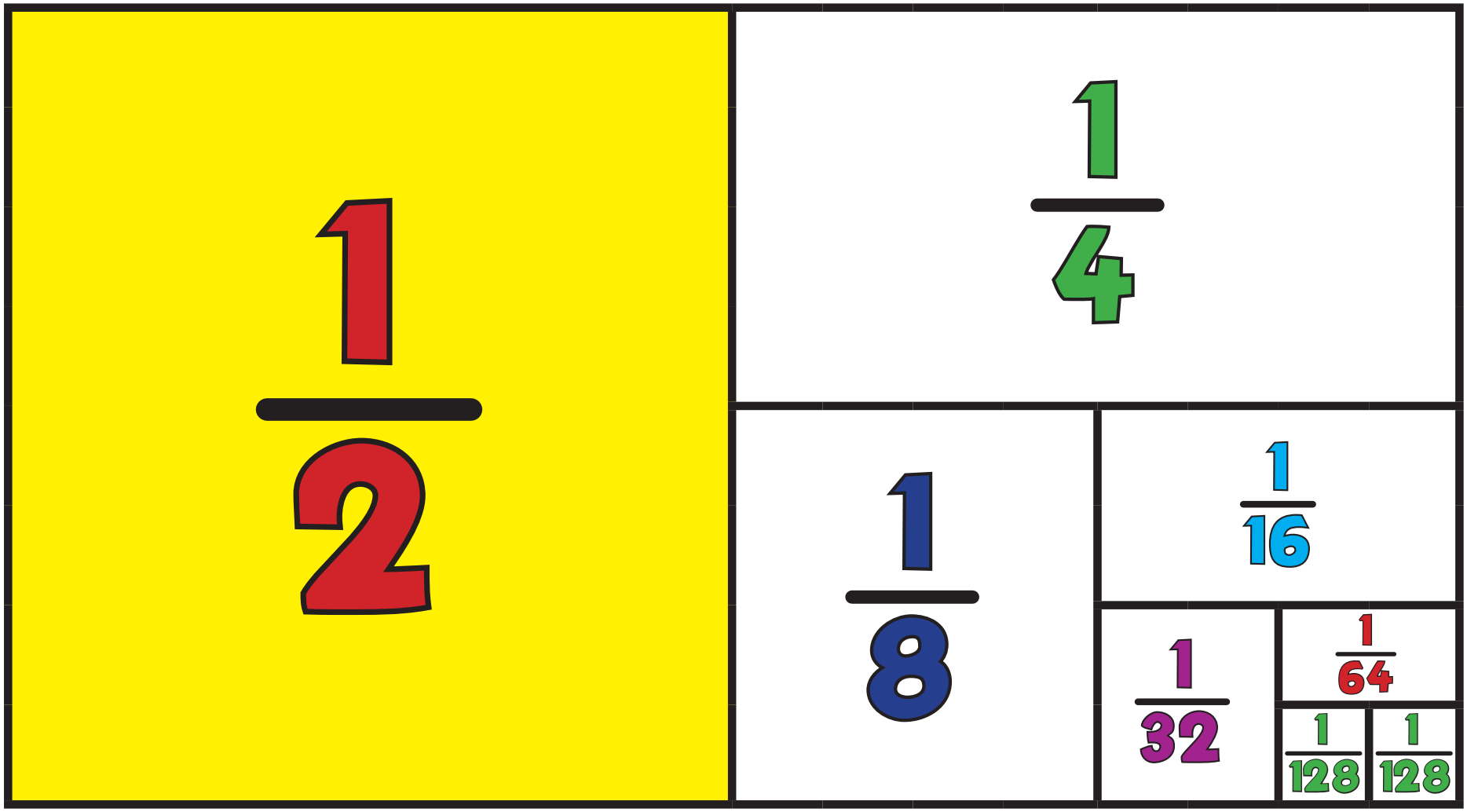


$\frac{3}{5}$



FC: Recognising Fractions

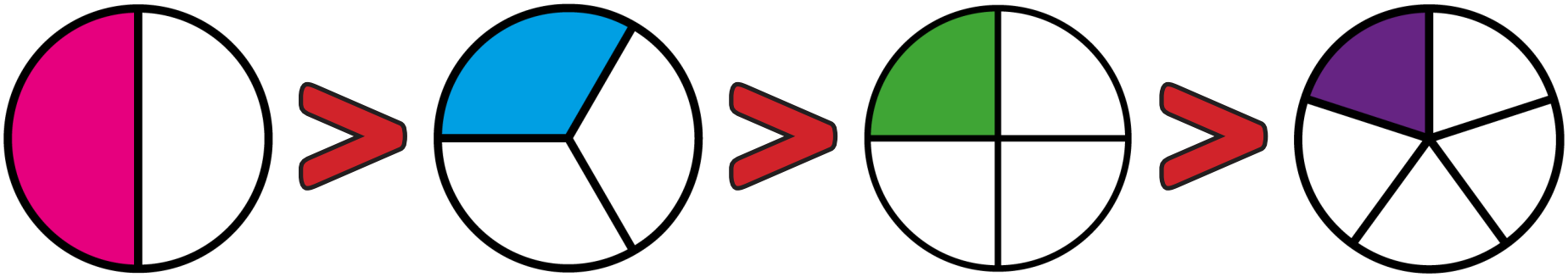
4



FD: Ordering Fractions

3a

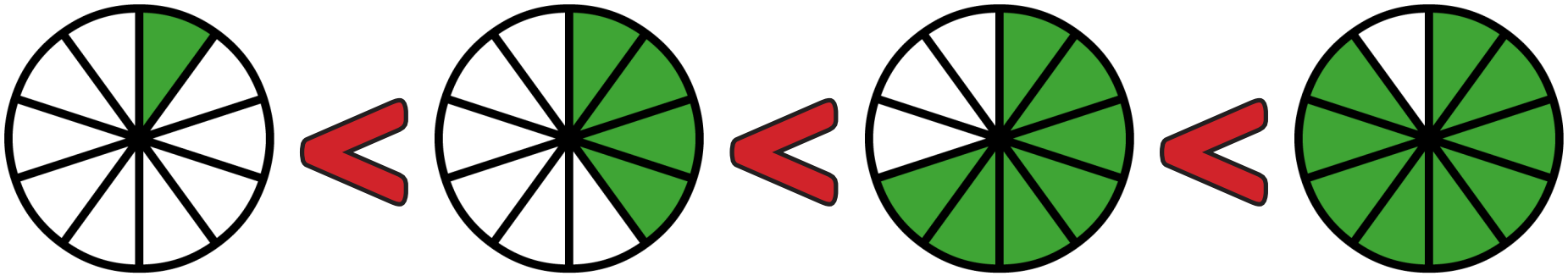
$$\frac{1}{2} > \frac{1}{3} > \frac{1}{4} > \frac{1}{5}$$



FD: Ordering Fractions

3b

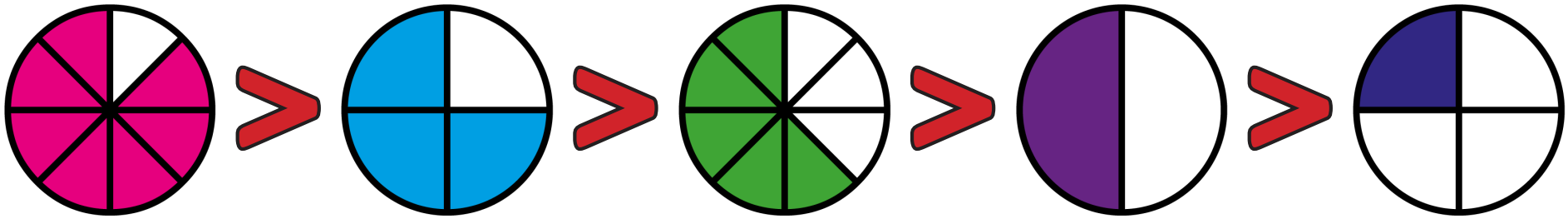
$$\frac{1}{10} < \frac{4}{10} < \frac{7}{10} < \frac{9}{10}$$



FD: Ordering Fractions

5a

$$\frac{7}{8} > \frac{3}{4} > \frac{5}{8} > \frac{1}{2} > \frac{1}{4}$$

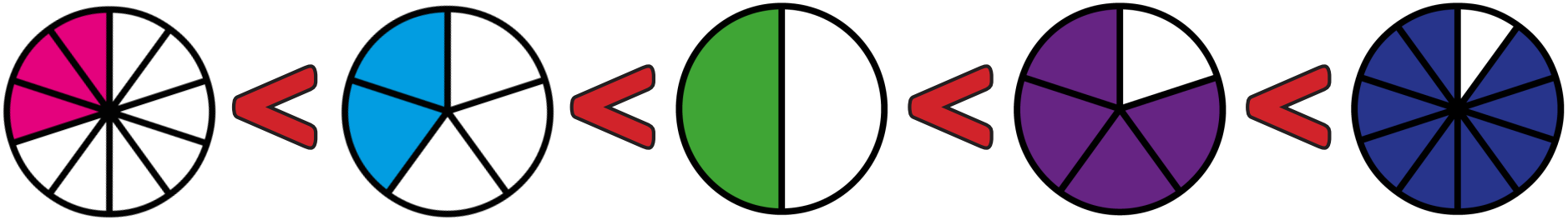


0.875 > 0.75 > 0.625 > 0.5 > 0.25

FD: Ordering Fractions

5b

$$\frac{3}{10} < \frac{2}{5} < \frac{1}{2} < \frac{4}{5} < \frac{9}{10}$$



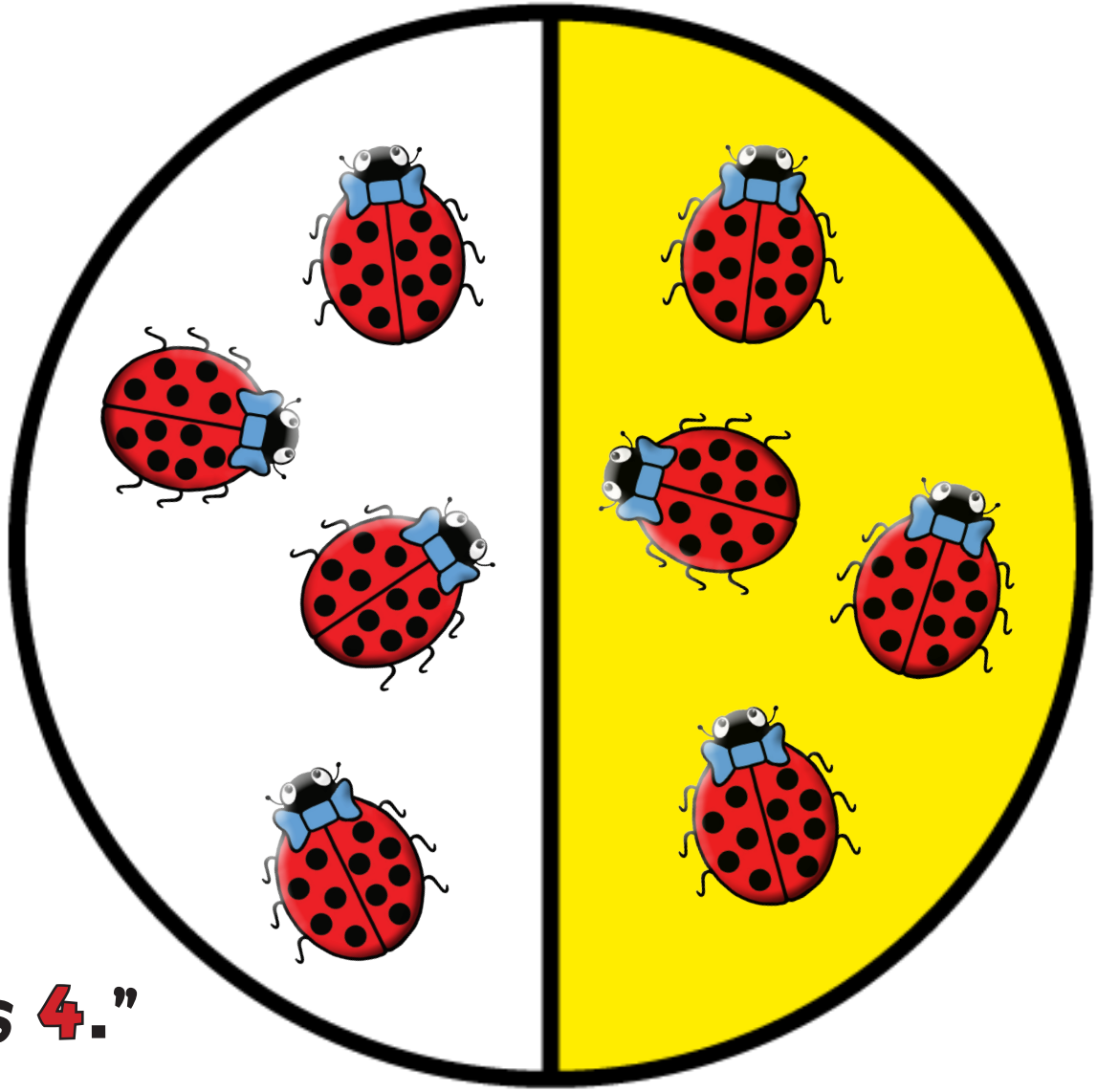
$$0.3 < 0.4 < 0.5 < 0.8 < 0.9$$

FE: Fraction of a Quantity

FS

8

$\frac{1}{2}$



$\frac{1}{2}$

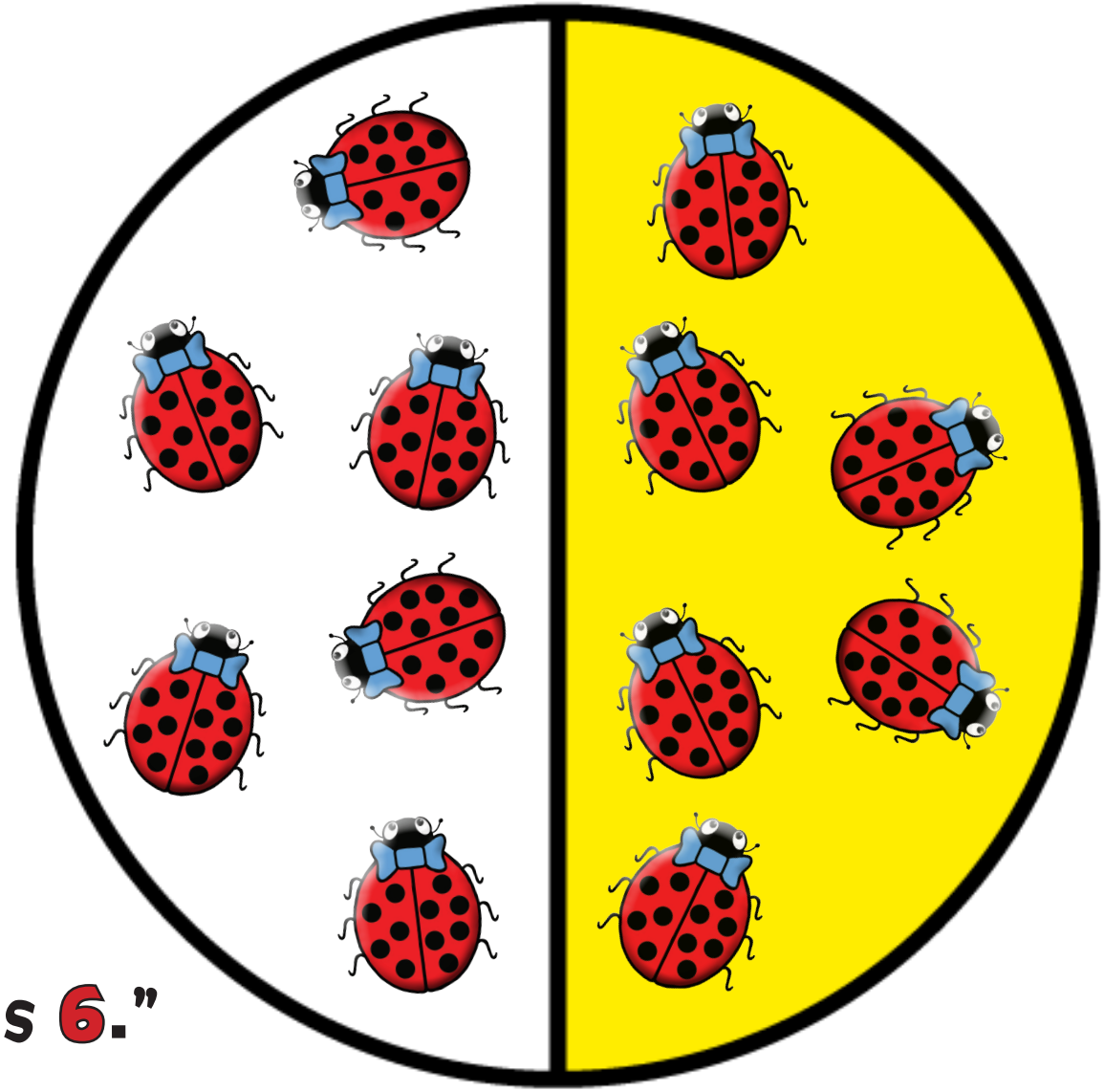
"Half of 8 is 4."

FE: Fraction of a Quantity

1a

12

$\frac{1}{2}$



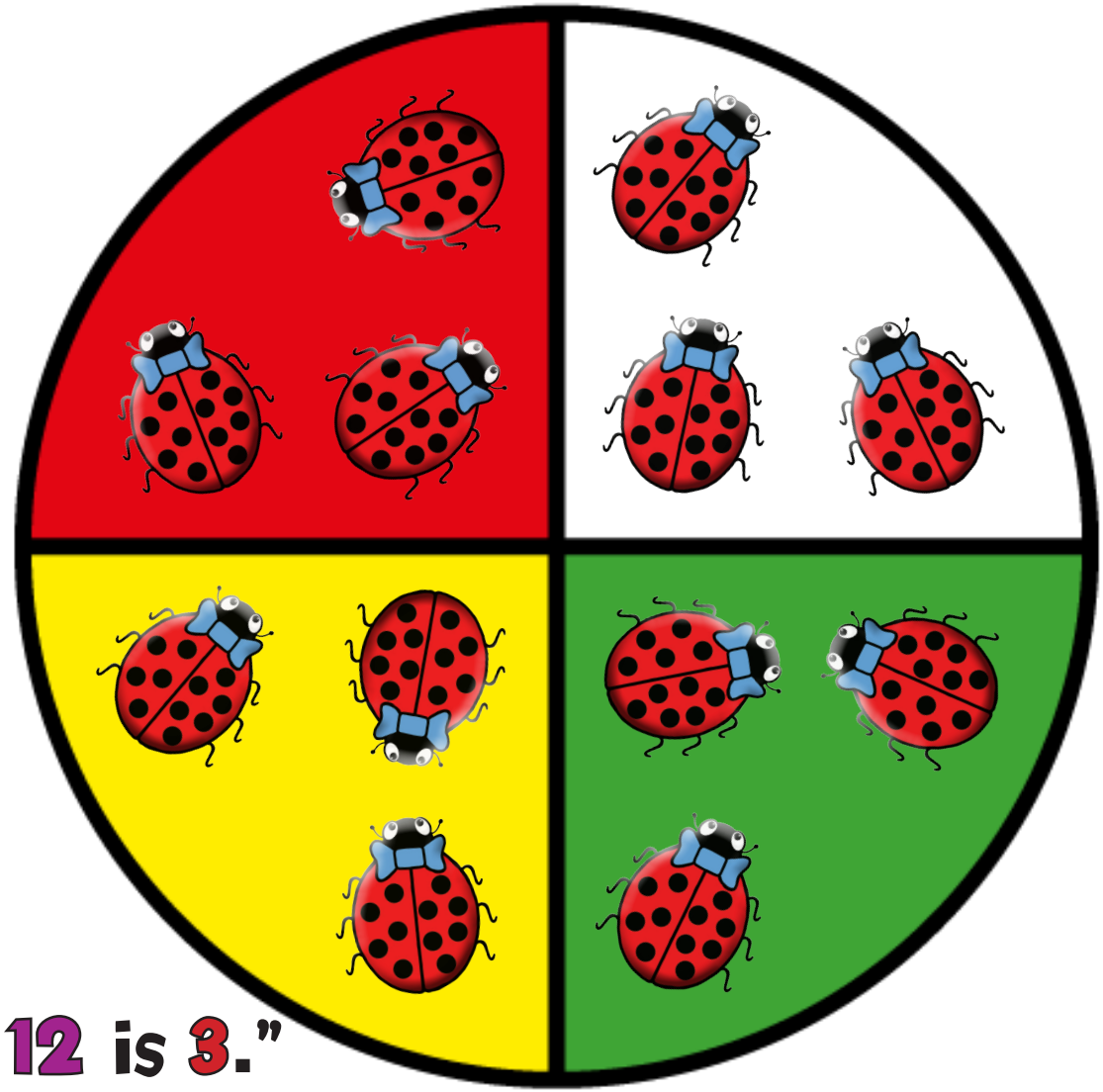
$\frac{1}{2}$

"Half of 12 is 6."

FE: Fraction of a Quantity

1b

12



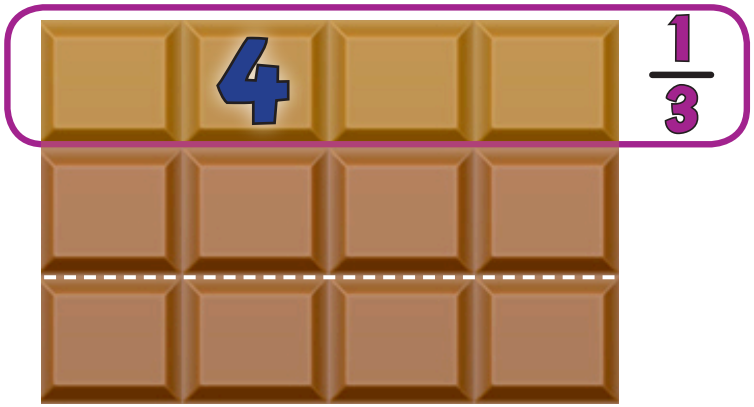
$\frac{1}{4}$ $\frac{1}{4}$ $\frac{1}{4}$ $\frac{1}{4}$

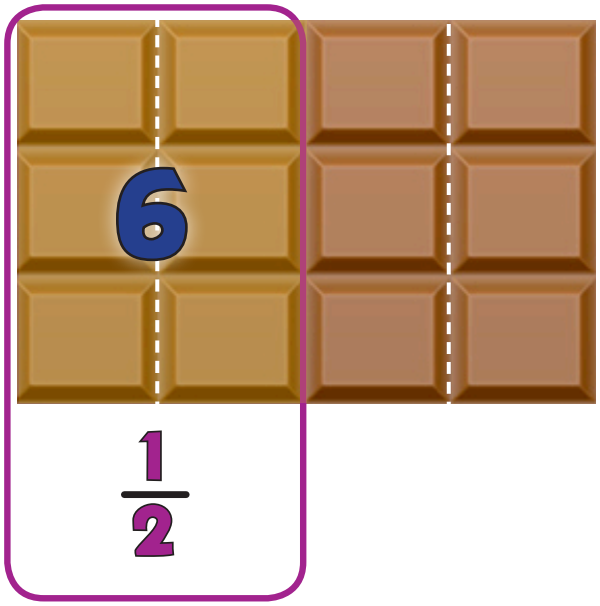
"A quarter of 12 is 3."

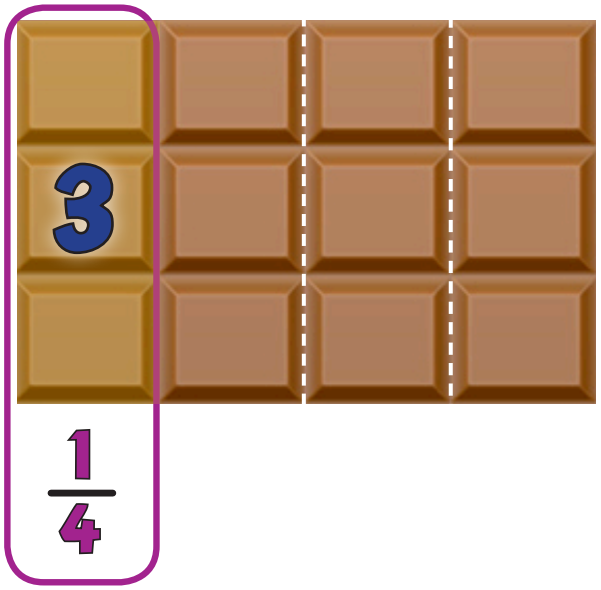
FE: Fraction of a Quantity

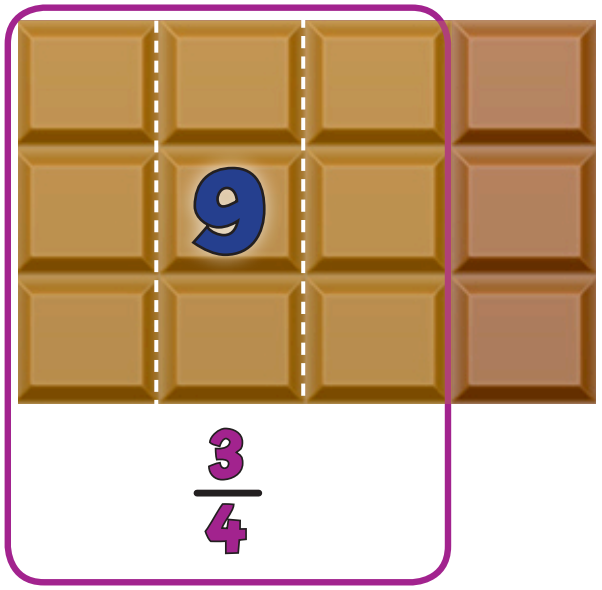
2

12 Chunks





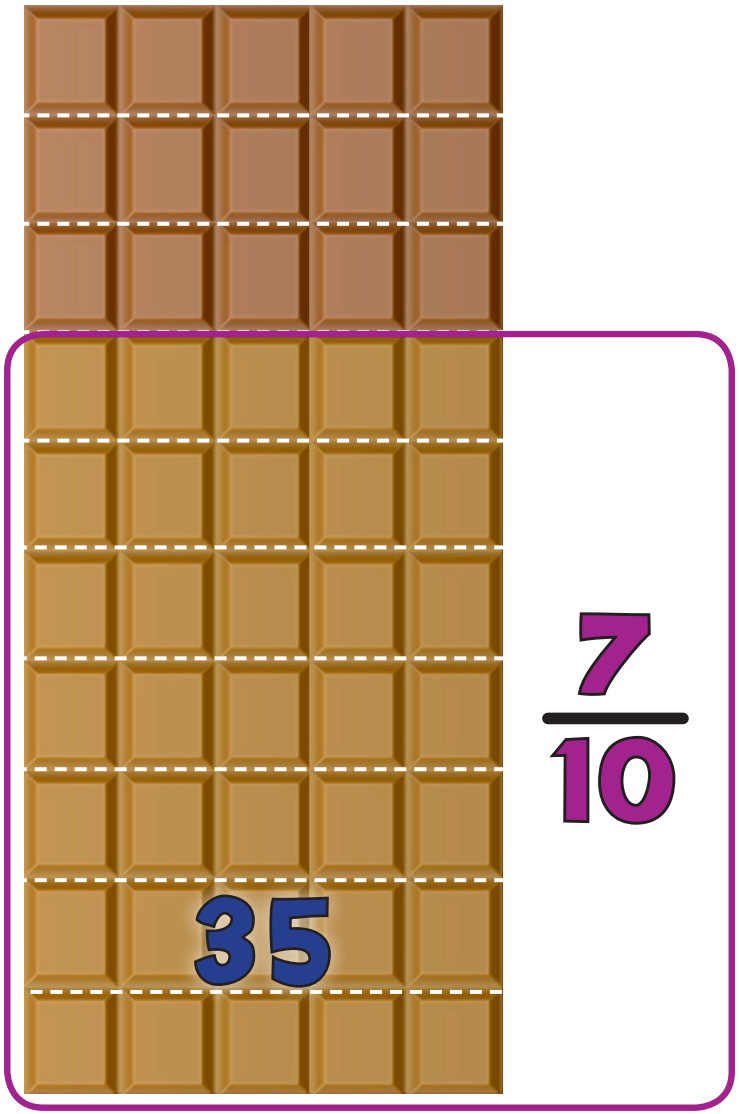


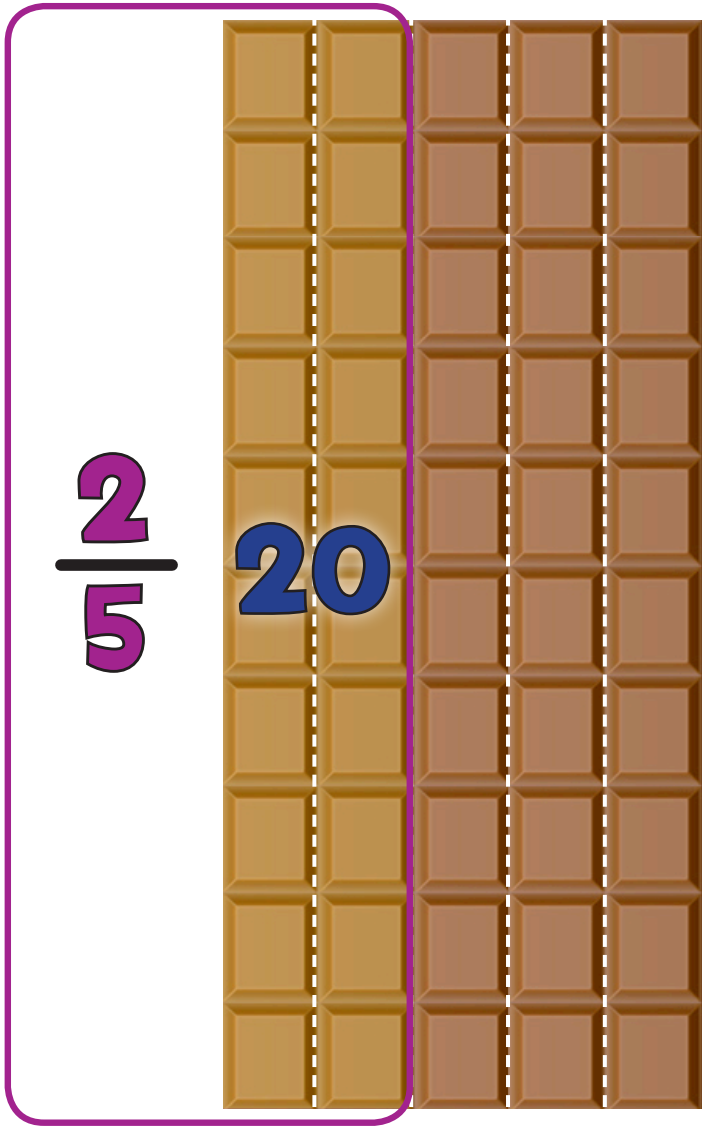


FE: Fraction of a Quantity

3

50
Chunks



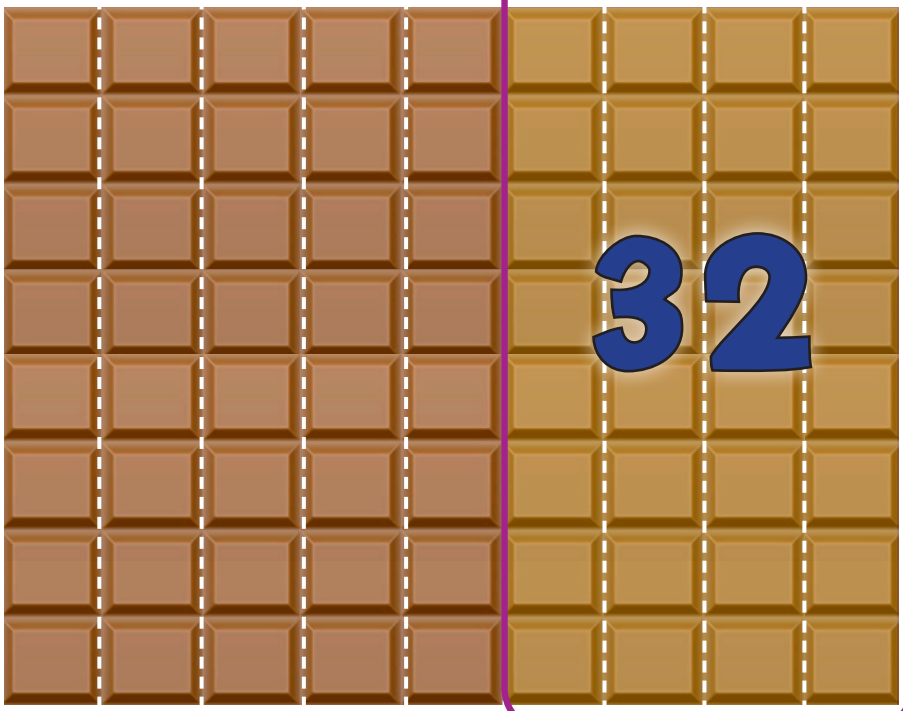


FE: Fraction of a Quantity

4

72
Chunks

$\frac{4}{9}$

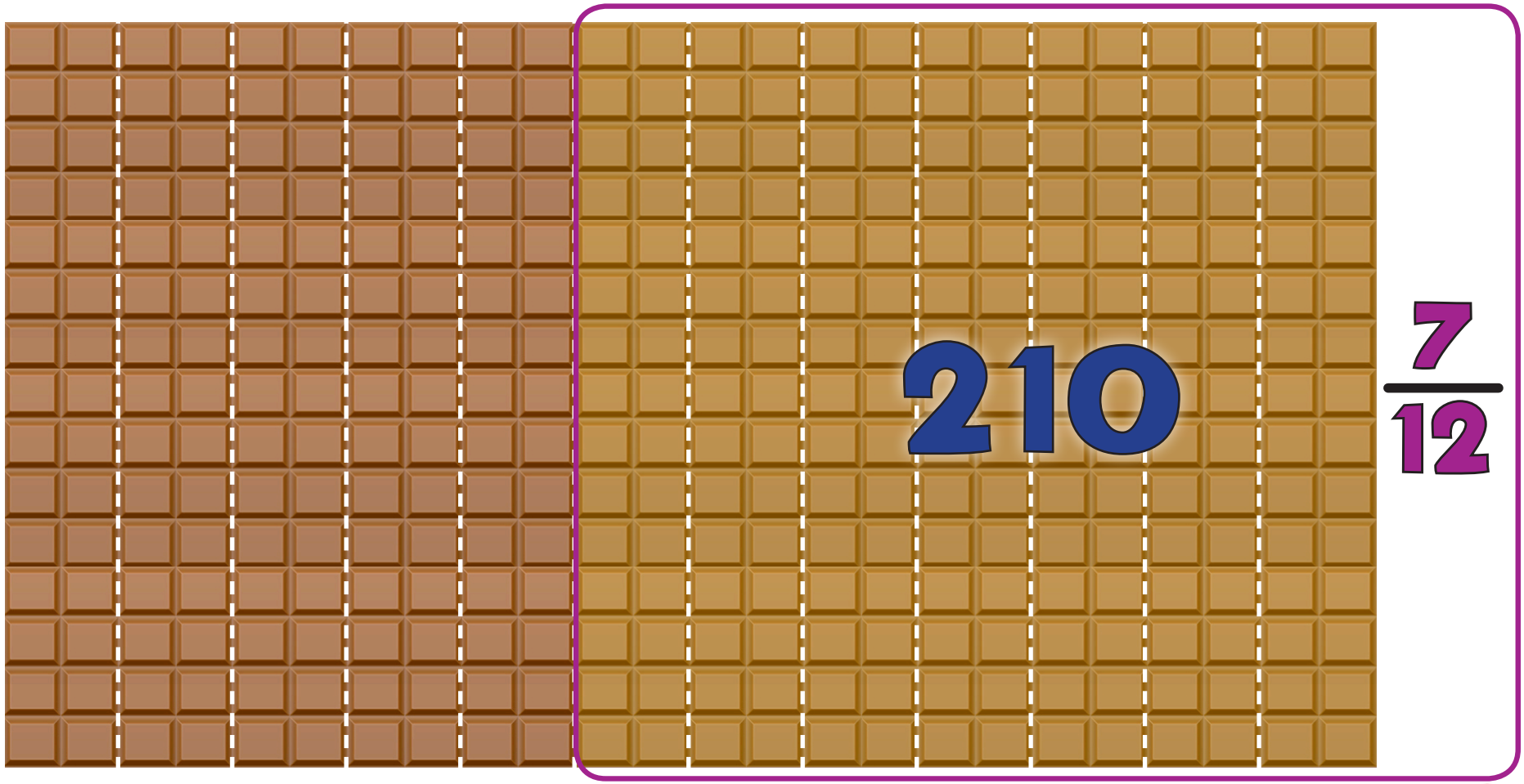


$\frac{7}{8}$

FE: Fraction of a Quantity

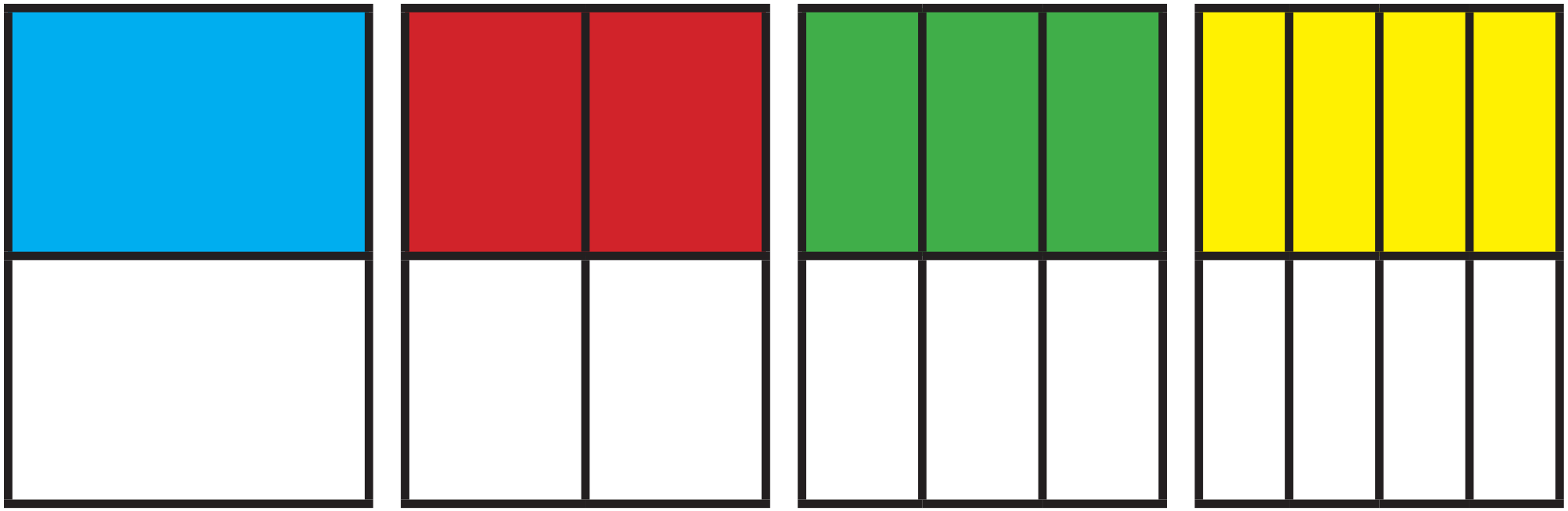
5

360 Chunks



FF: Equivalent Fractions

2a

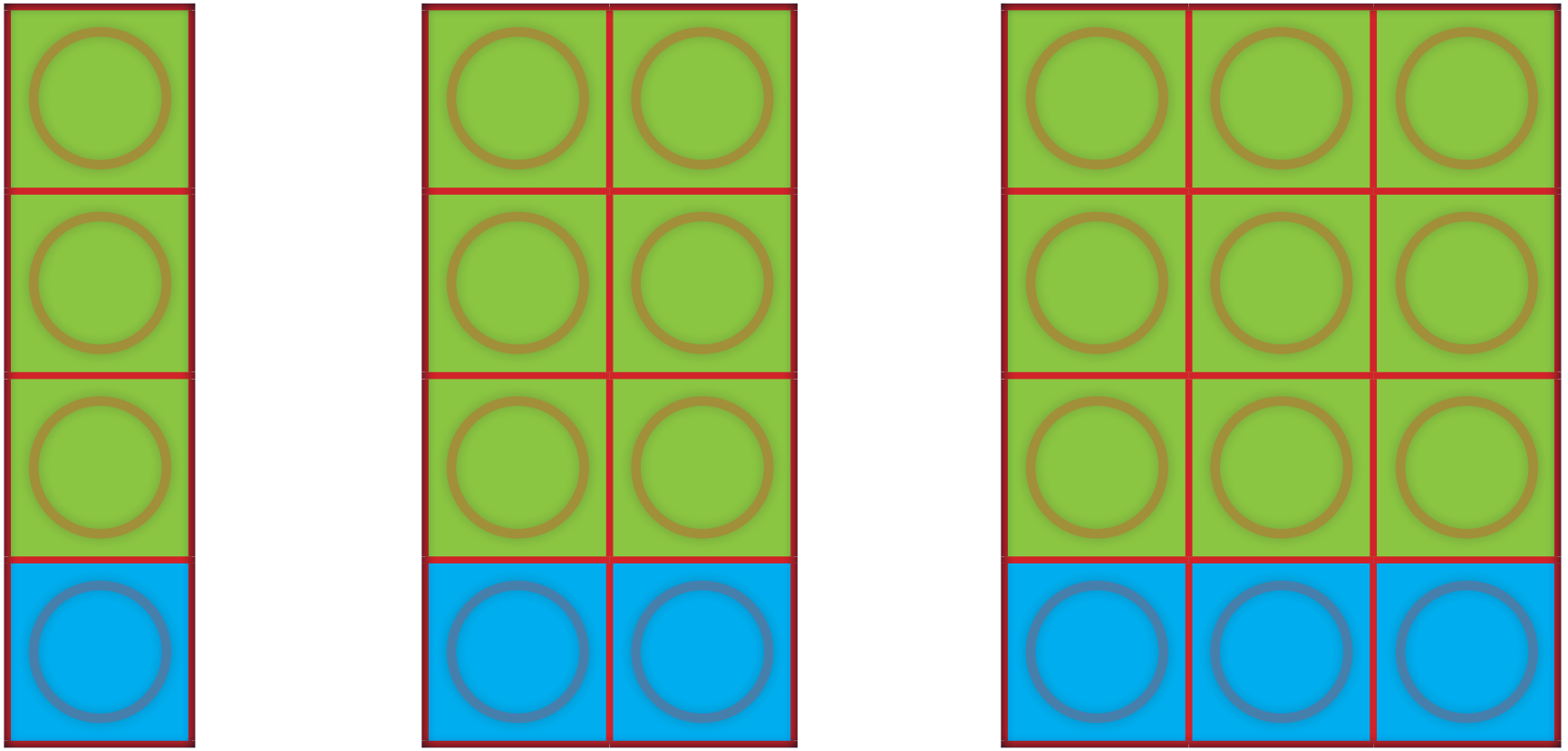


$$\frac{1}{2} = \frac{2}{4} = \frac{3}{6} = \frac{4}{8}$$

FF: Equivalent Fractions

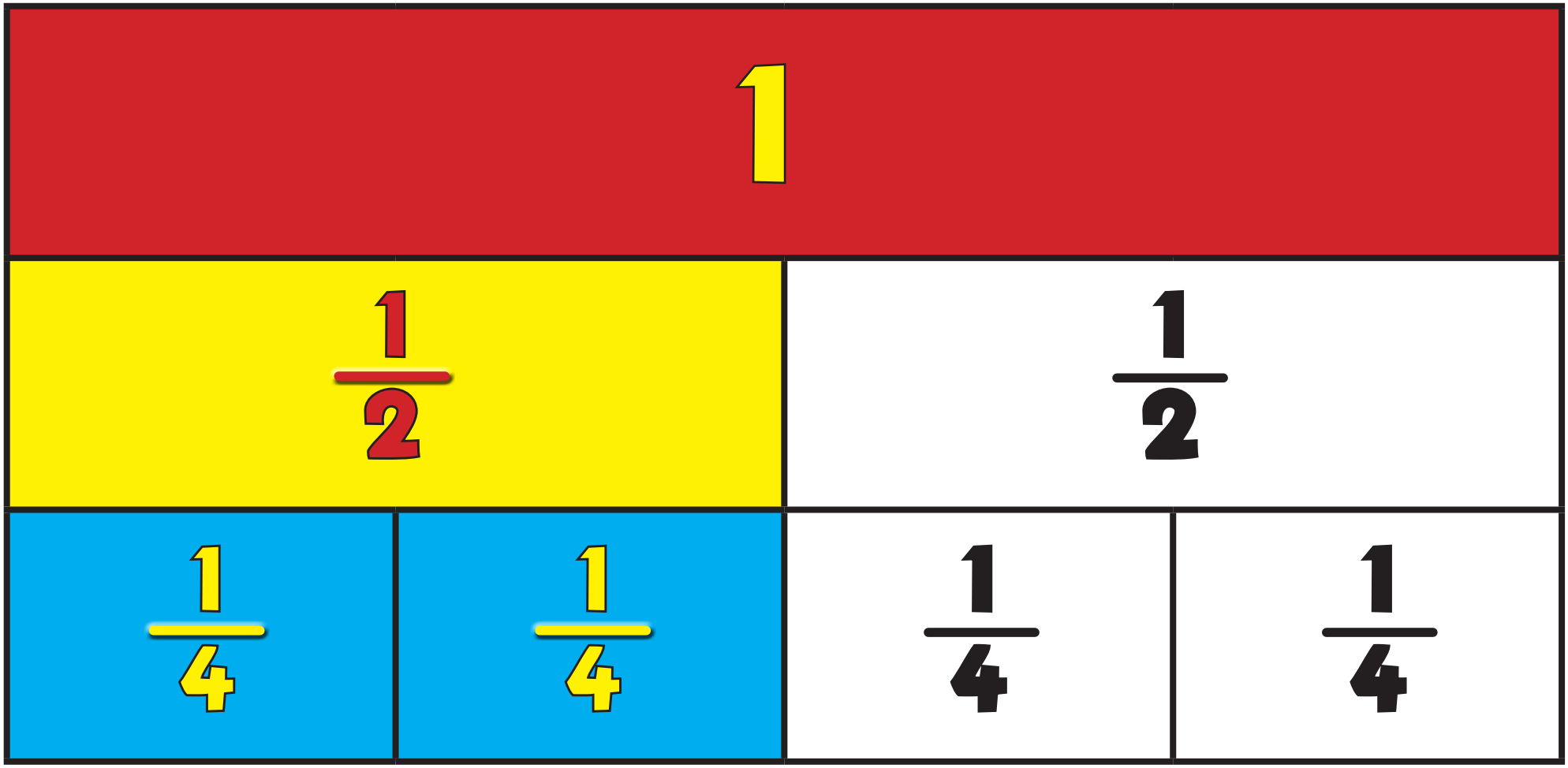
2b

$\frac{1}{4}$ $\frac{1}{4}$ $\left(\frac{2}{8}\right)$ $\frac{1}{4}$ $\left(\frac{3}{12}\right)$



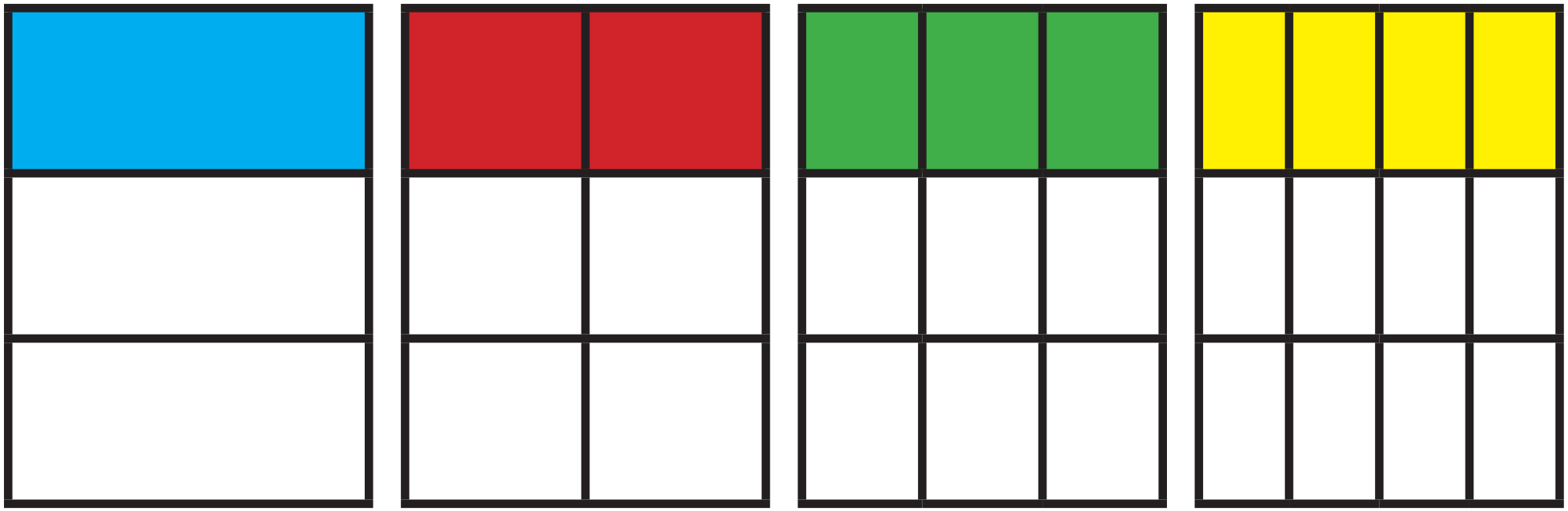
FF: Equivalent Fractions

2c



FF: Equivalent Fractions

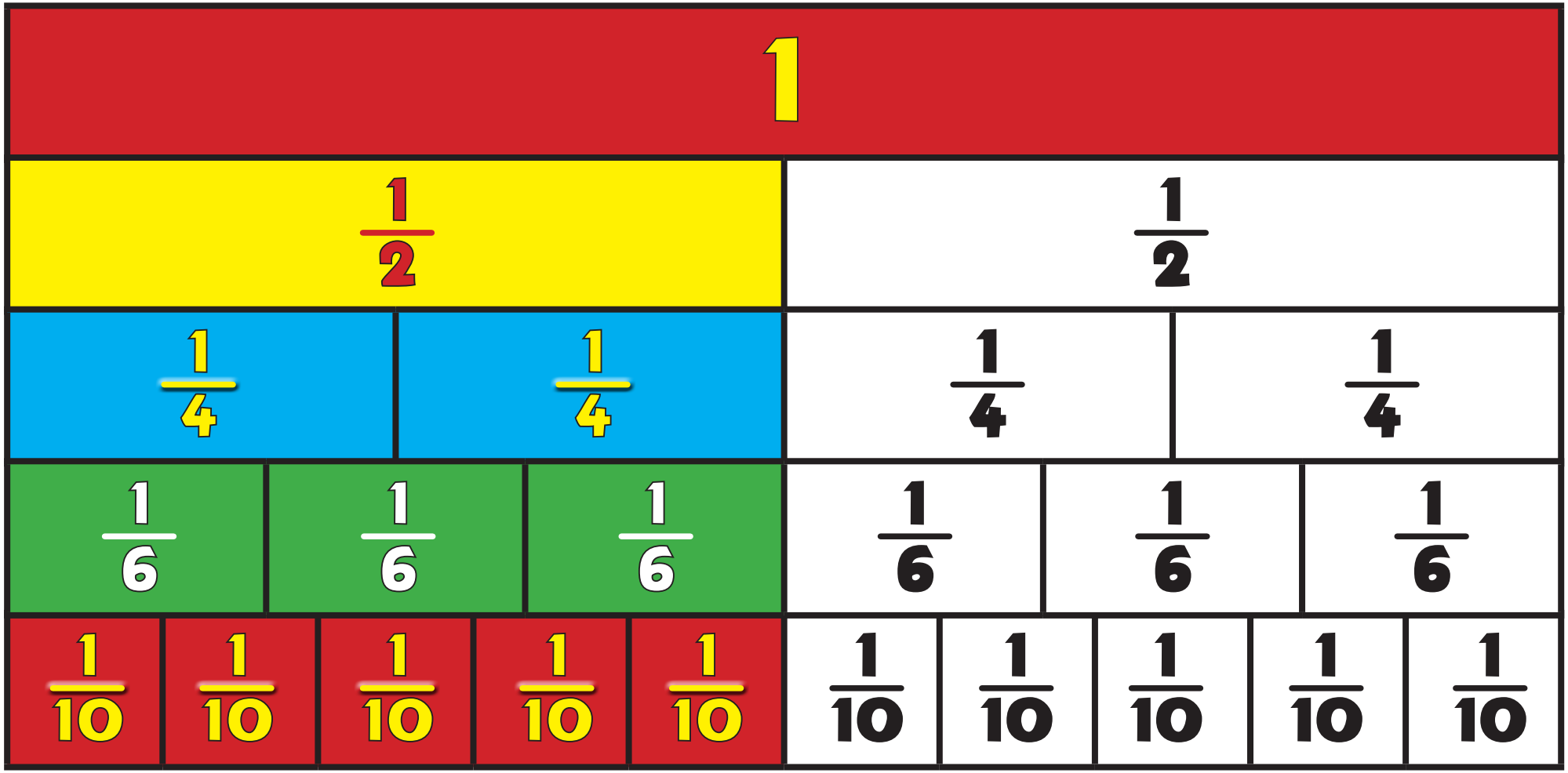
3a



$$\frac{1}{3} = \frac{2}{6} = \frac{3}{9} = \frac{4}{12}$$

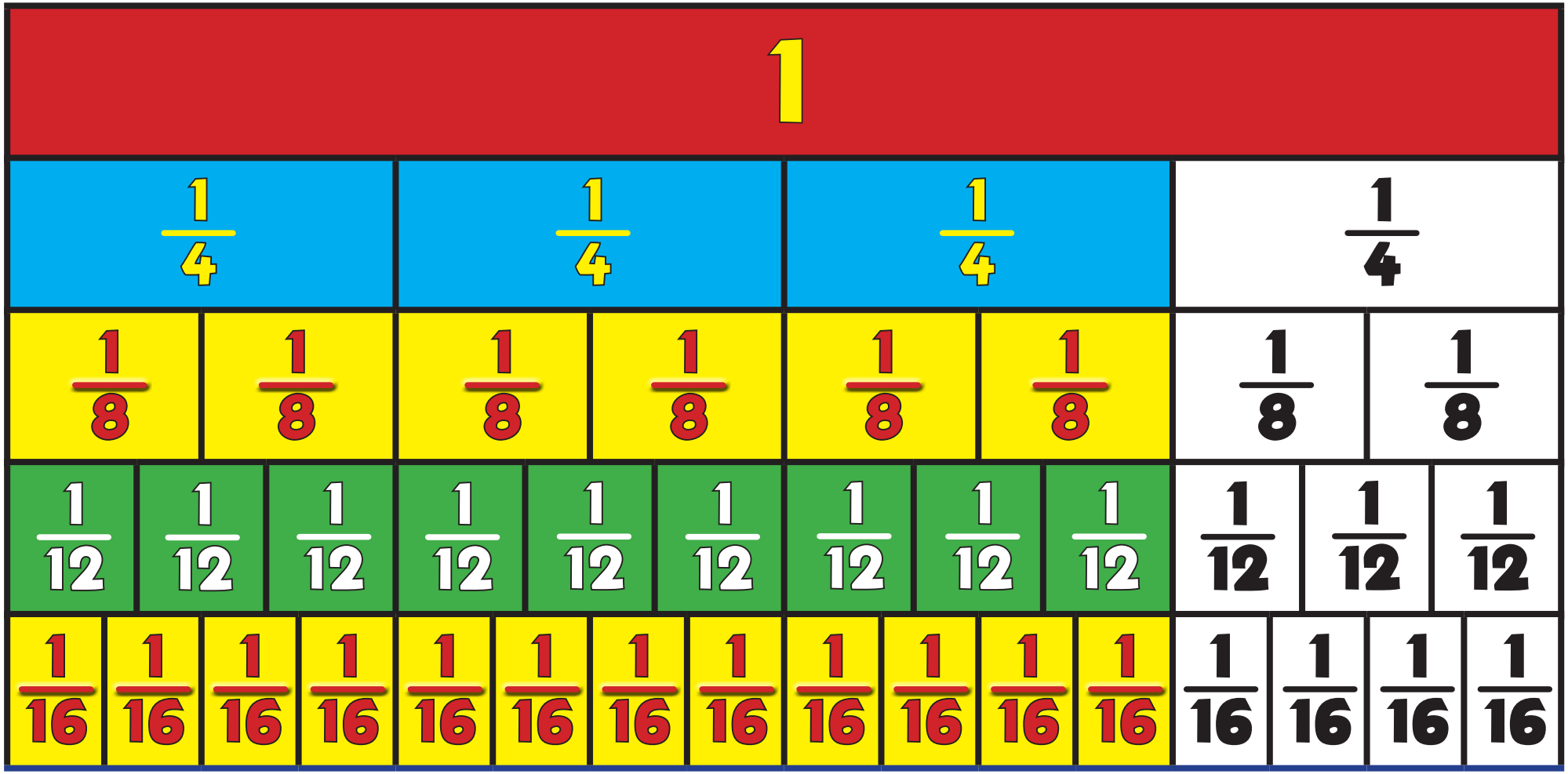
FF: Equivalent Fractions

3b



FF: Equivalent Fractions

3c



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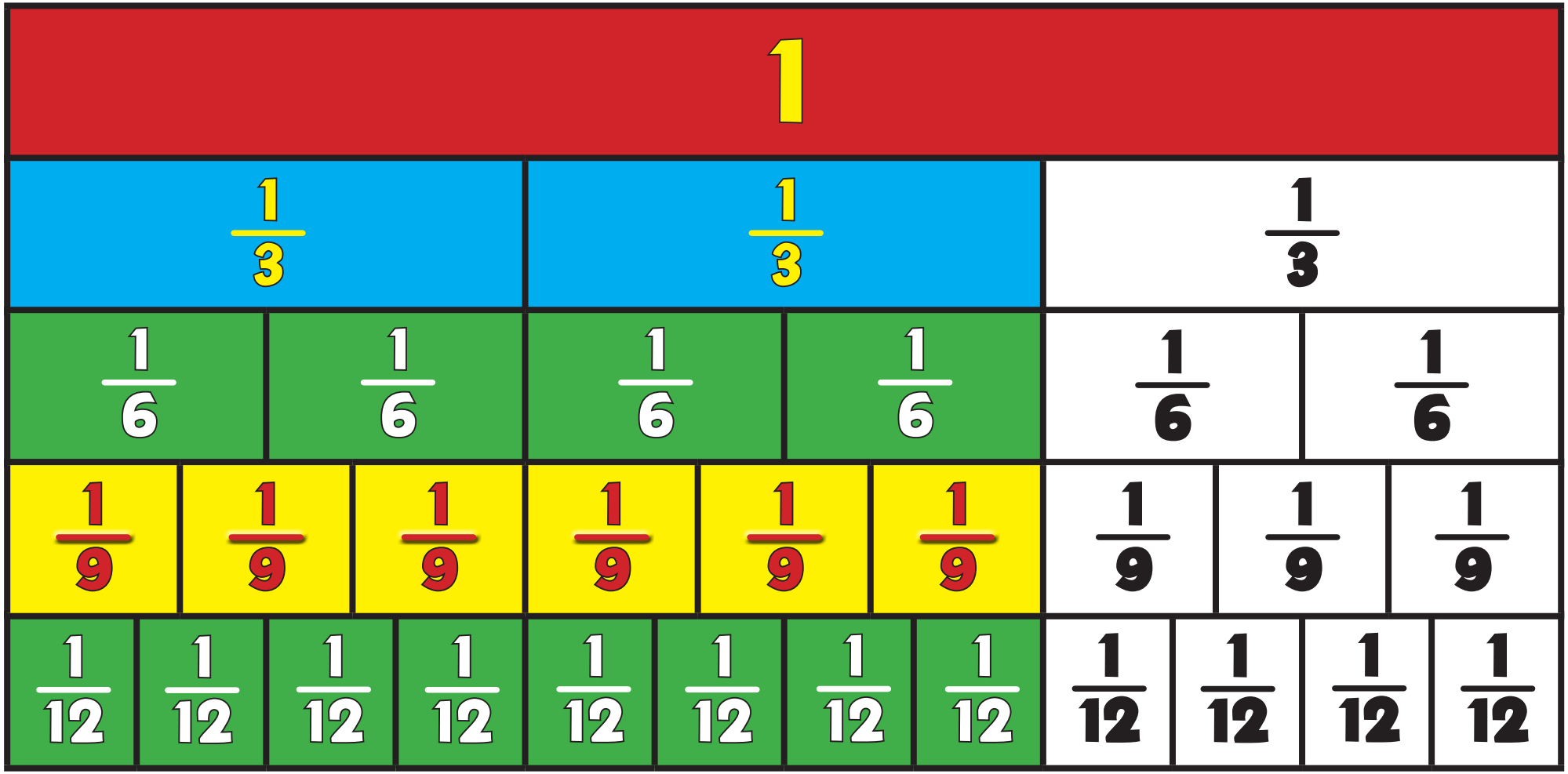
FF: Equivalent Fractions

3d



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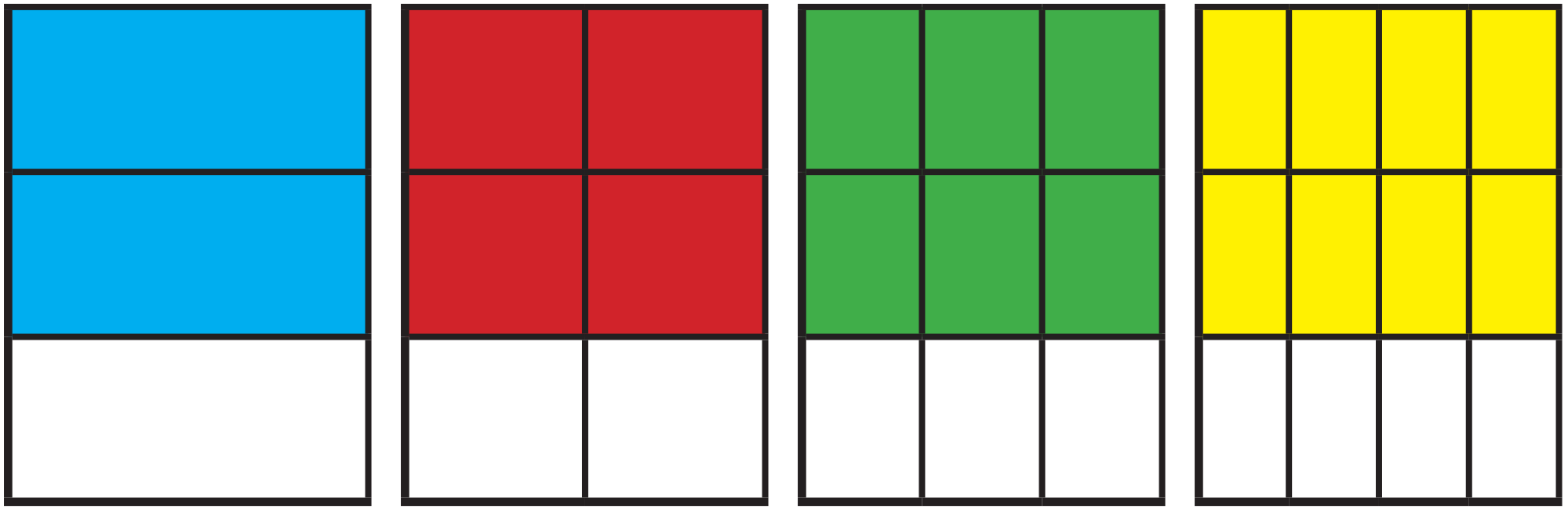
FF: Equivalent Fractions

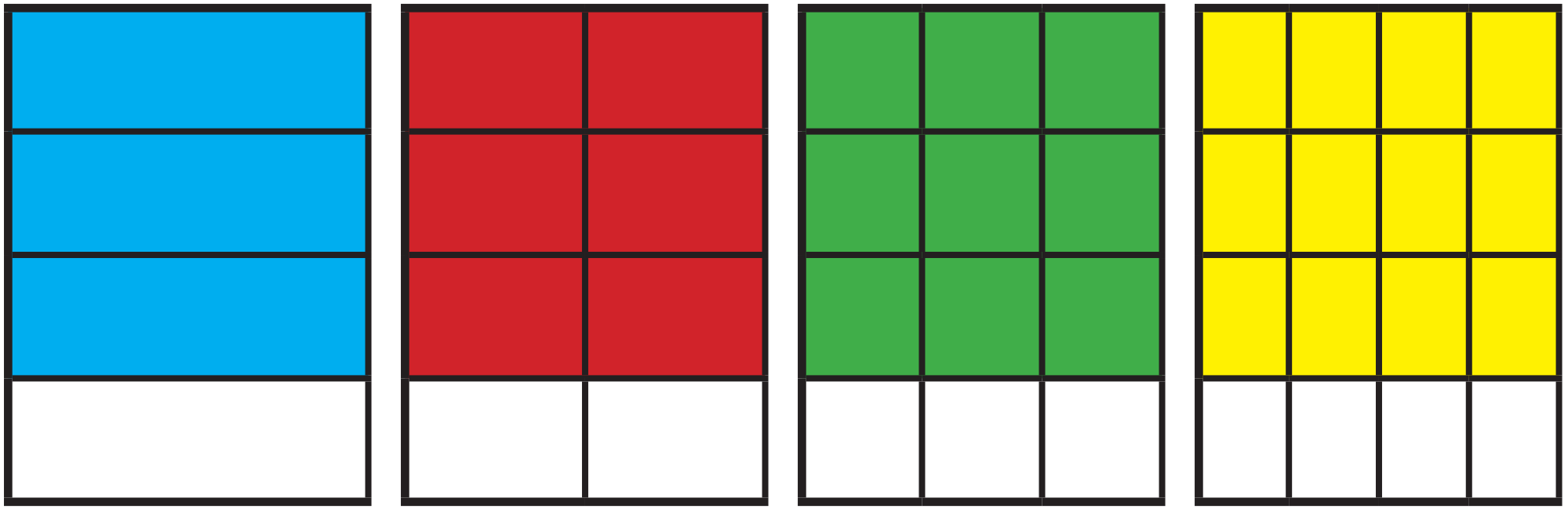
4a



$$\frac{2}{3} = \frac{4}{6} = \frac{6}{9} = \frac{8}{12}$$

FF: Equivalent Fractions

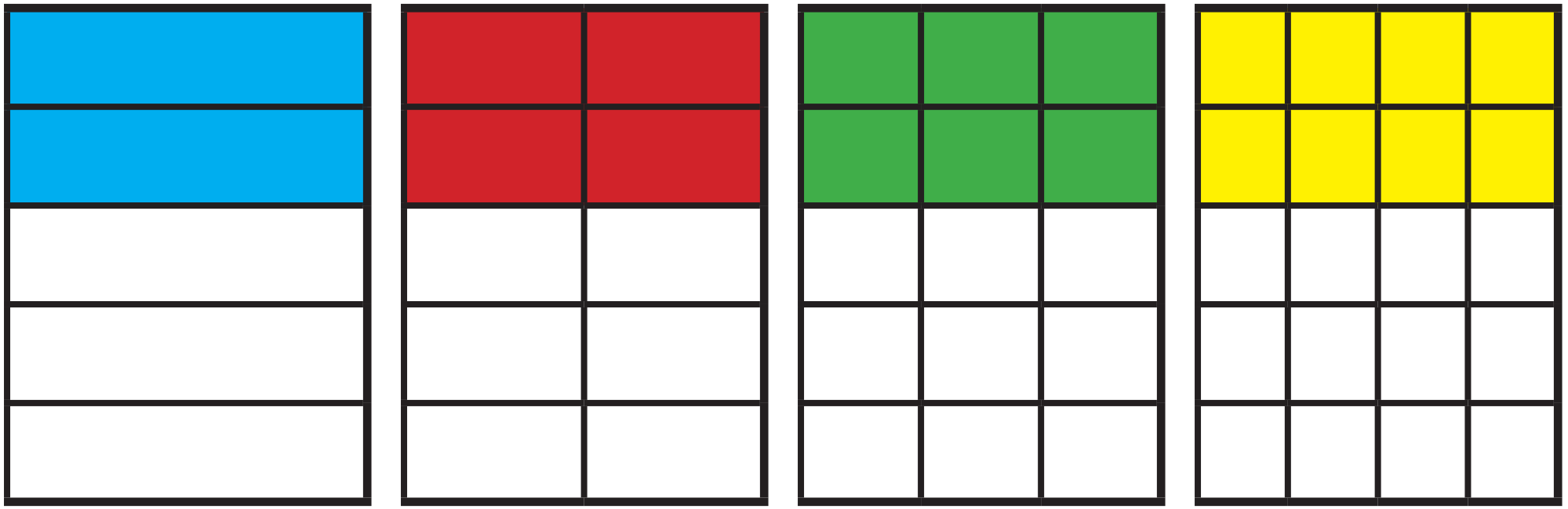
4b



$$\frac{3}{4} = \frac{6}{8} = \frac{9}{12} = \frac{12}{16}$$

FF: Equivalent Fractions

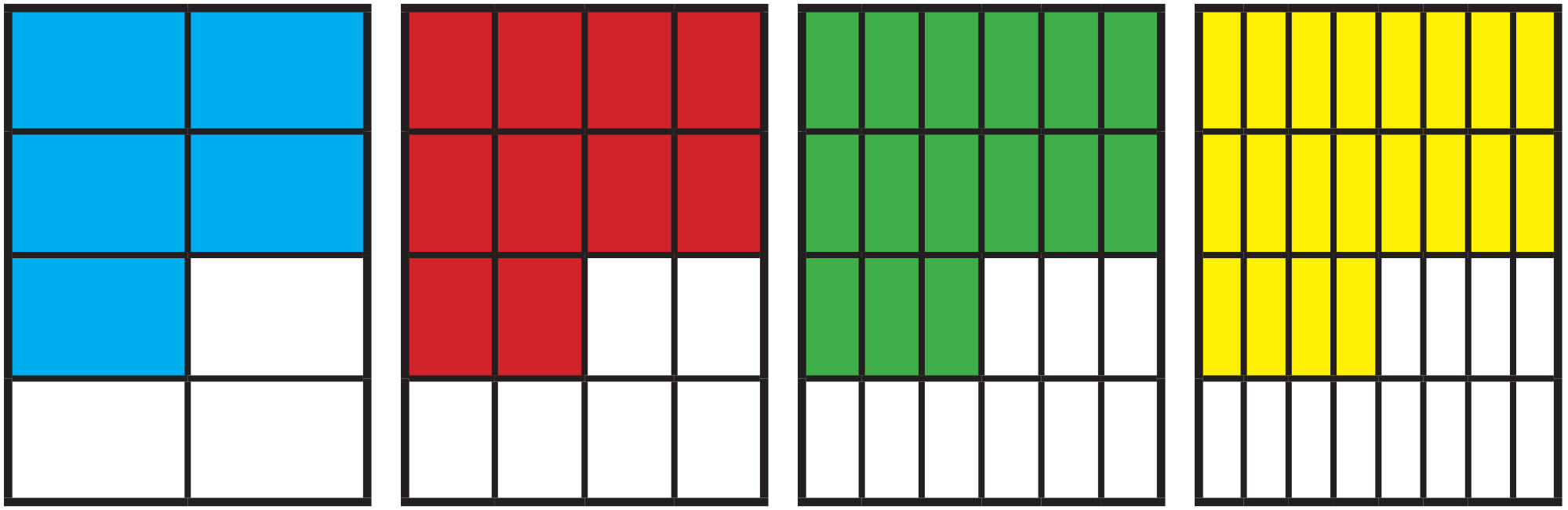
4c



$$\frac{2}{5} = \frac{4}{10} = \frac{6}{15} = \frac{8}{20}$$

FF: Equivalent Fractions

4d



$$\frac{5}{8} = \frac{10}{16} = \frac{15}{24} = \frac{20}{32}$$

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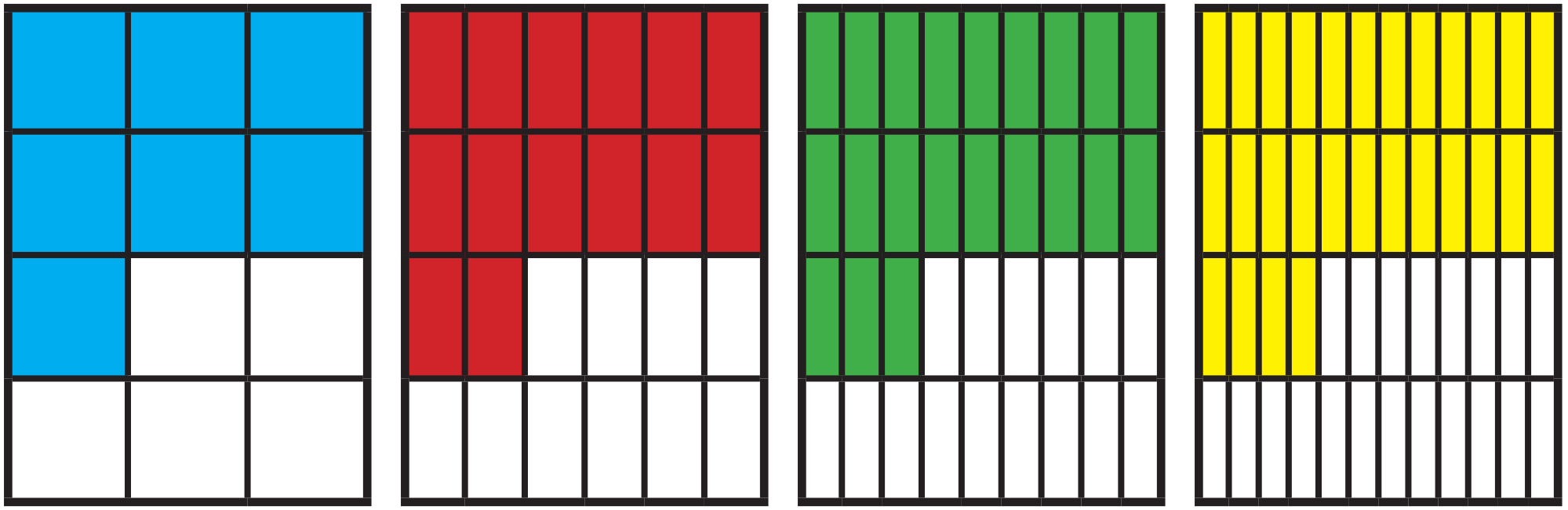
FF: Equivalent Fractions

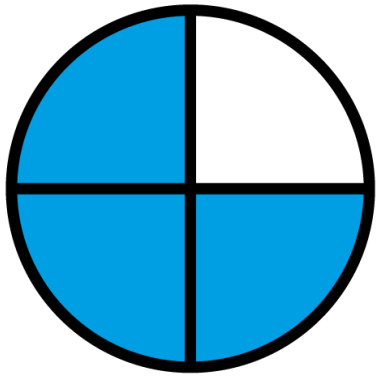
4e



$$\frac{7}{12} = \frac{14}{24} = \frac{21}{36} = \frac{28}{48}$$

FF: Equivalent Fractions

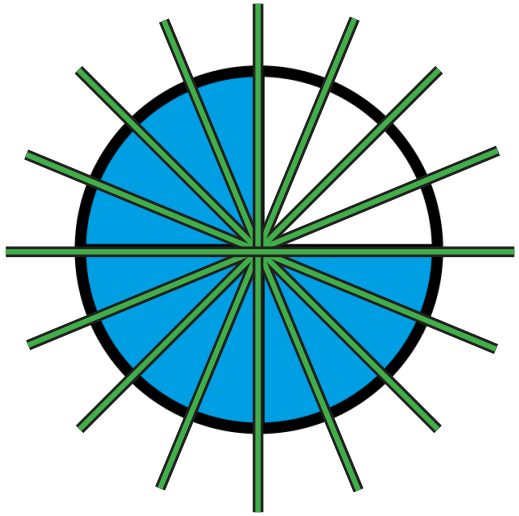
5



$$\frac{3}{4} = \frac{12}{16}$$

×4

×4



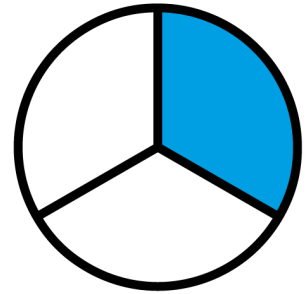
FF: Equivalent Fractions

6

$$\frac{75}{225} = \frac{1}{3}$$

÷75

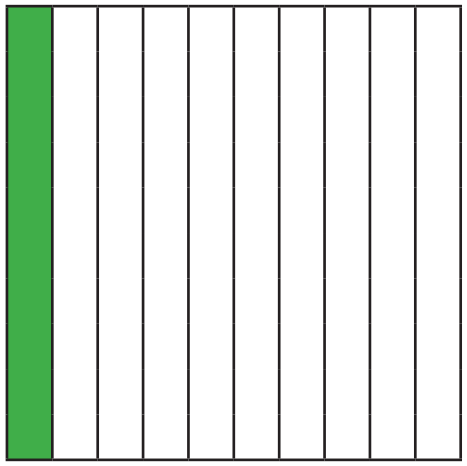
÷75



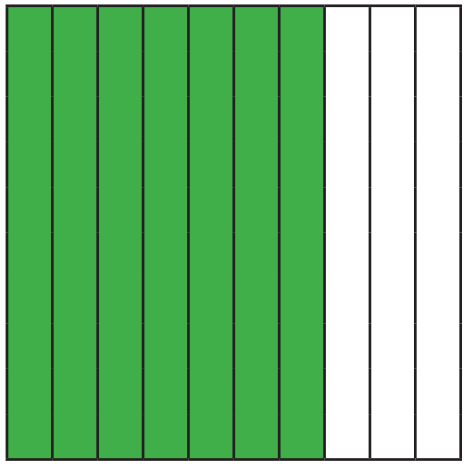
FG: Decimals/Fractions/Percentages

3

$\frac{1}{10} = 0.1 =$



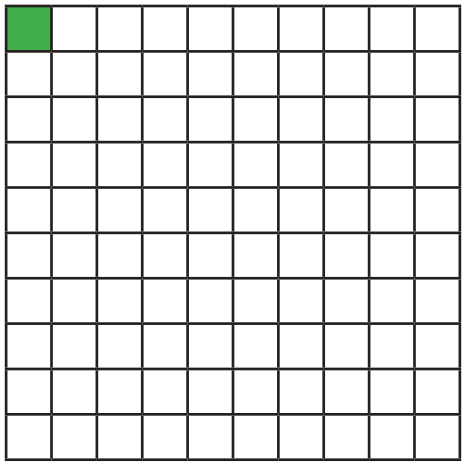
$\frac{7}{10} = 0.7 =$



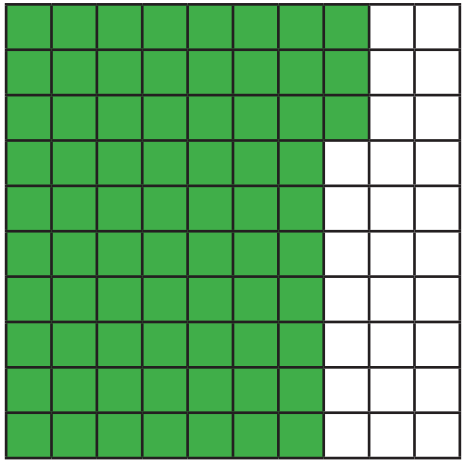
FH: Decimals/Fractions/Percentages

4

$$\frac{1}{100} = 0.01 =$$



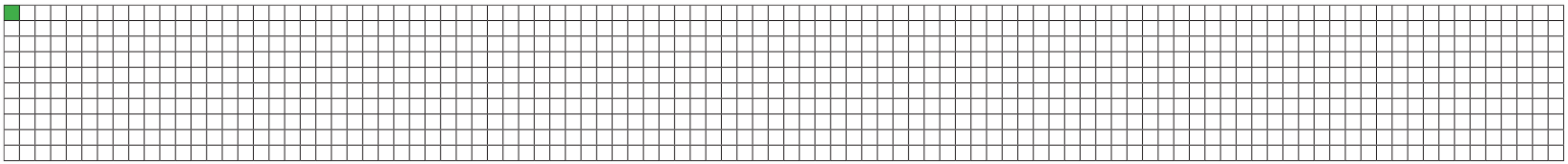
$$\frac{73}{100} = 0.73 =$$



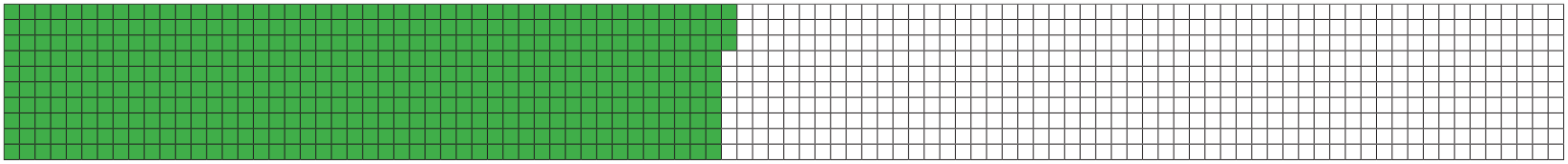
FG: Decimals/Fractions/Percentages

5a

$$\frac{1}{1000} = 0.001$$



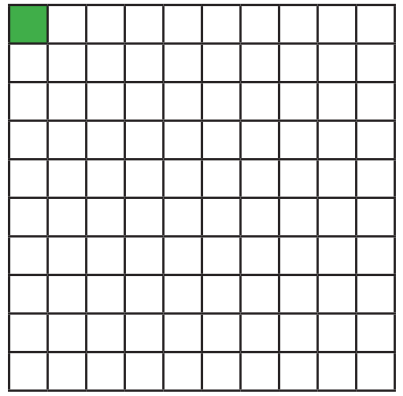
$$\frac{463}{1000} = 0.463$$



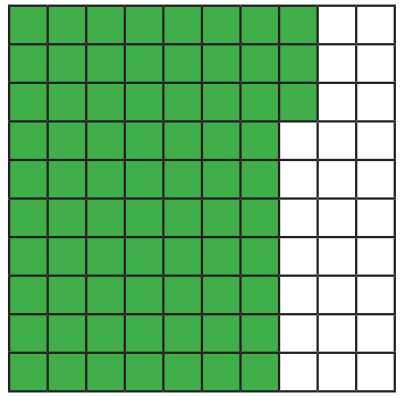
FG: Decimals/Fractions/Percentages

5b

$\frac{1}{100} = 0.01 = 1\% =$

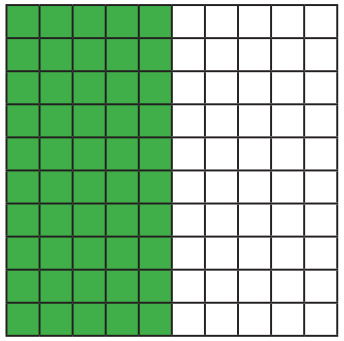


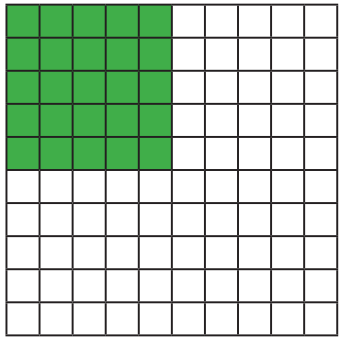
$\frac{73}{100} = 0.73 = 73\% =$

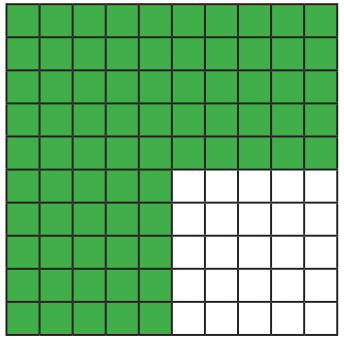


FH: Common FDP Equivalences

4

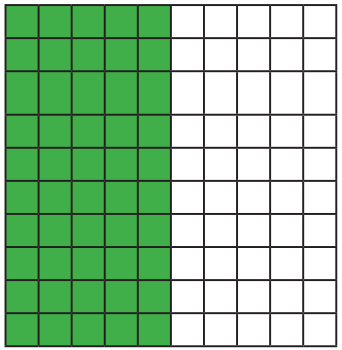
$\frac{1}{2} = 0.5 =$ 

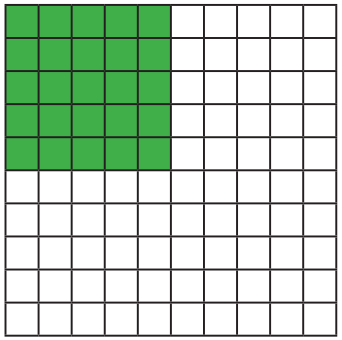
$\frac{1}{4} = 0.25 =$ 

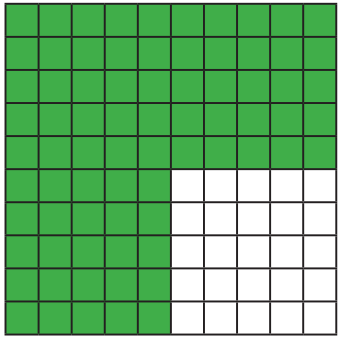
$\frac{3}{4} = 0.75 =$ 

FH: Common FDP Equivalences

5a

$\frac{1}{2} = 0.5 = 50\% =$ 

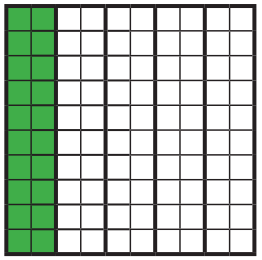
$\frac{1}{4} = 0.25 = 25\% =$ 

$\frac{3}{4} = 0.75 = 75\% =$ 

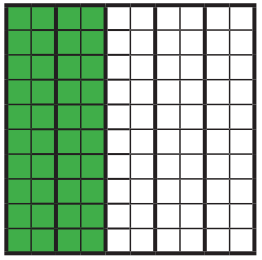
FH: Common FDP Equivalences

5b

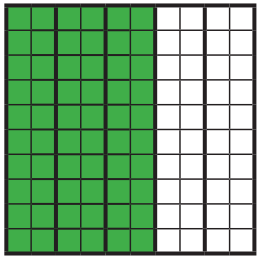
$\frac{1}{5}$ = 0.2 = 20% =



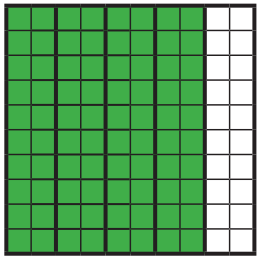
$\frac{2}{5}$ = 0.4 = 40% =



$\frac{3}{5}$ = 0.6 = 60% =

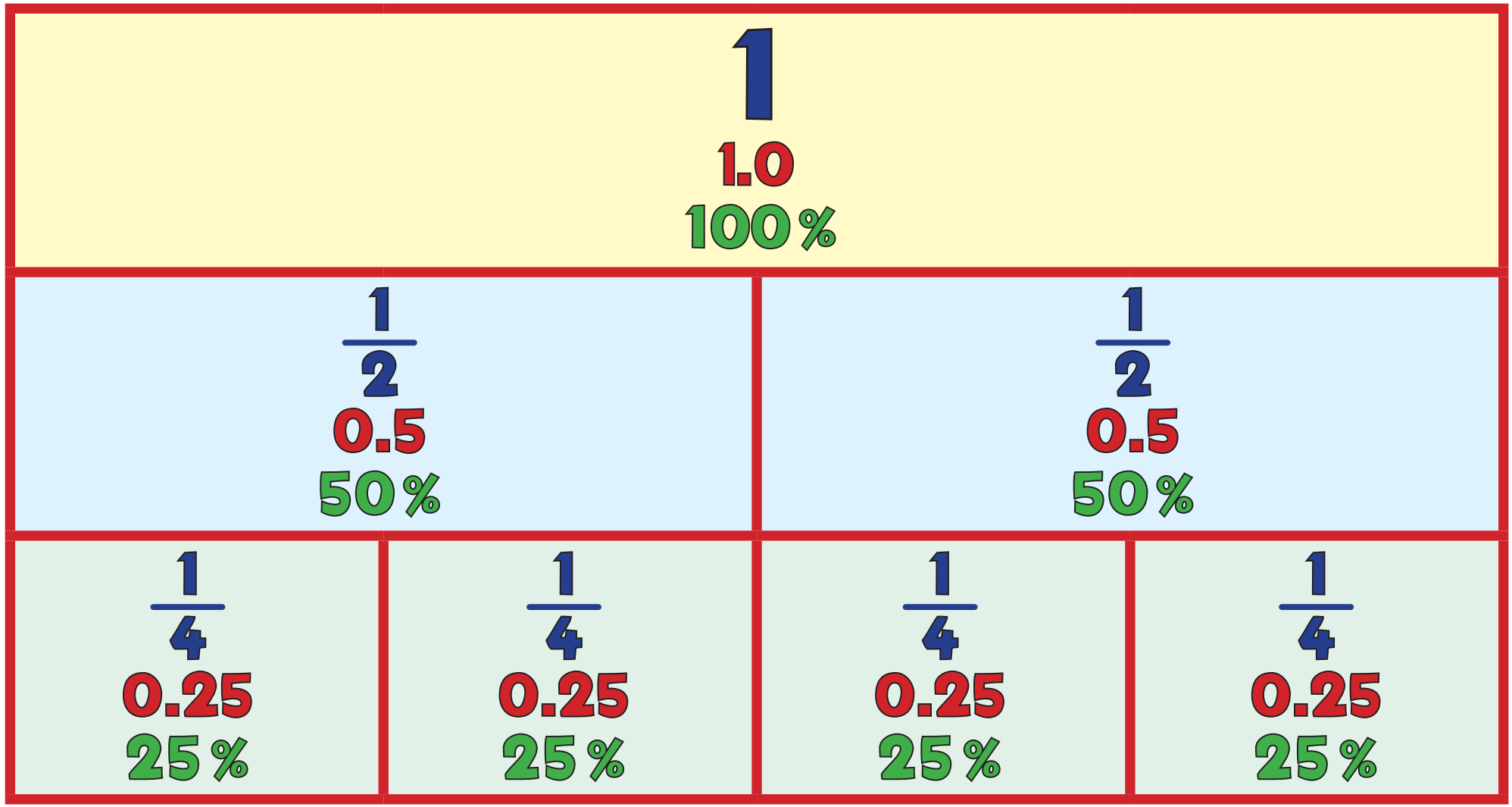


$\frac{4}{5}$ = 0.8 = 80% =



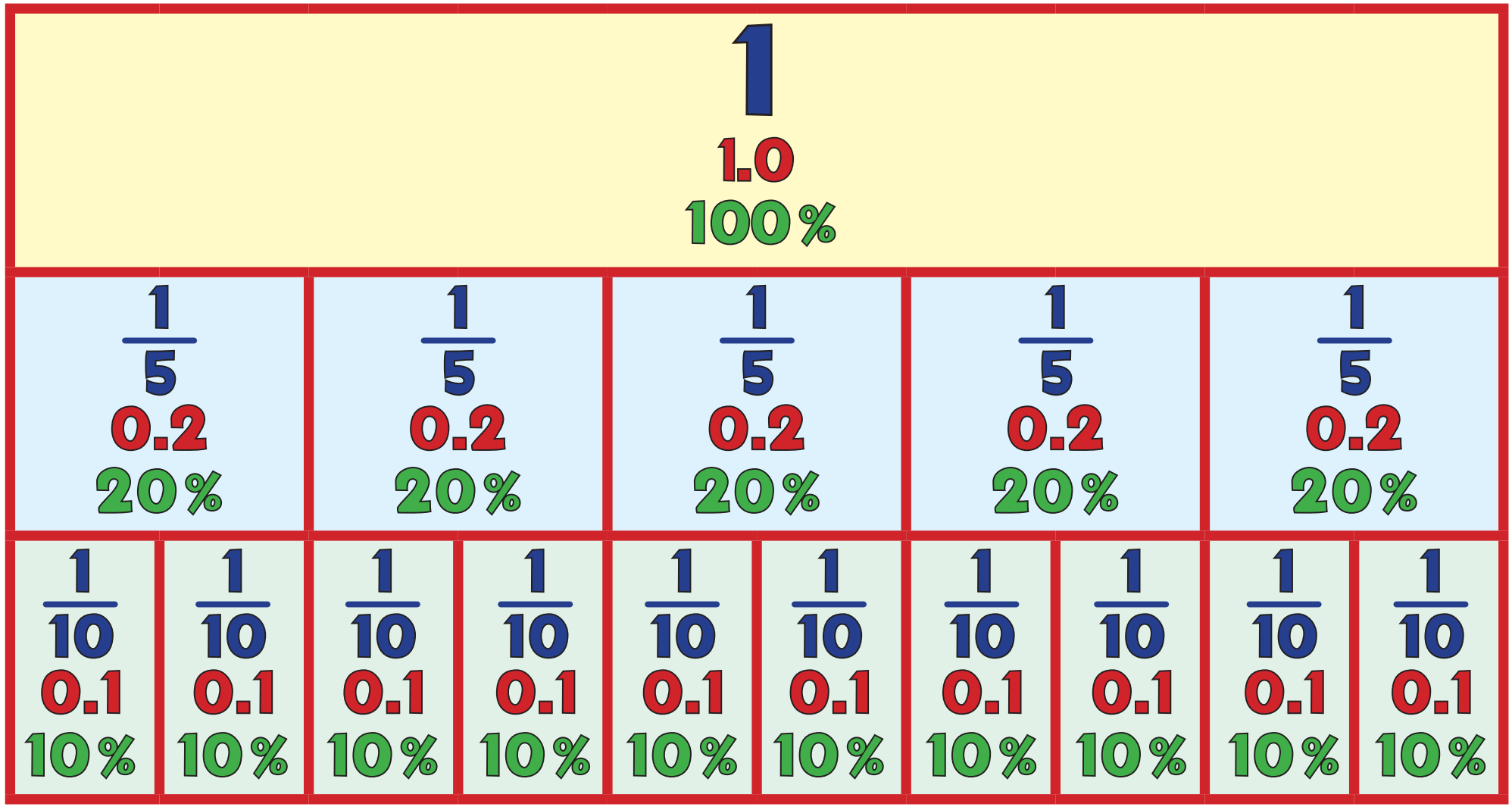
FH: Common FDP Equivalences

5c



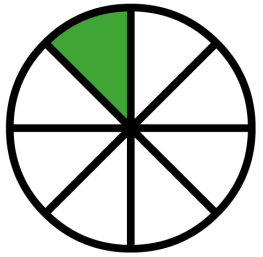
FH: Common FDP Equivalences

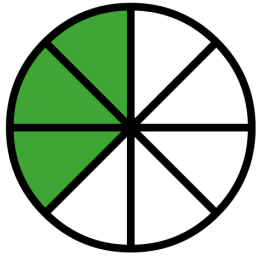
5d

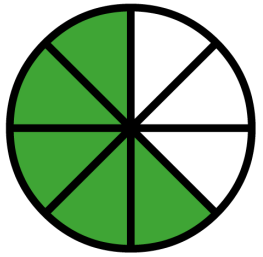


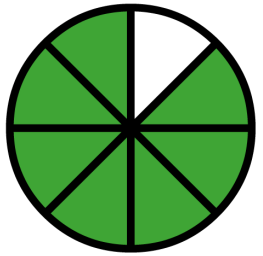
FH: Common FDP Equivalences

6a

$\frac{1}{8}$ = 0.125 = 12.5% = 

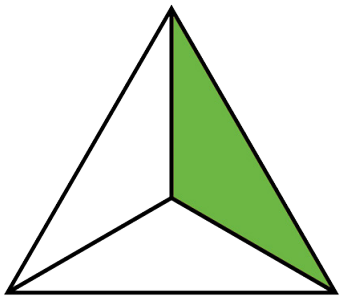
$\frac{3}{8}$ = 0.375 = 37.5% = 

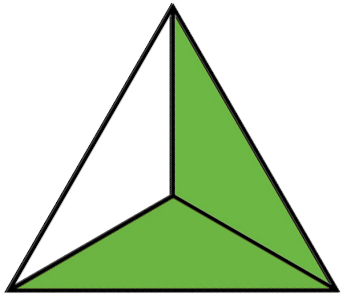
$\frac{5}{8}$ = 0.625 = 62.5% = 

$\frac{7}{8}$ = 0.875 = 87.5% = 

FH: Common FDP Equivalences

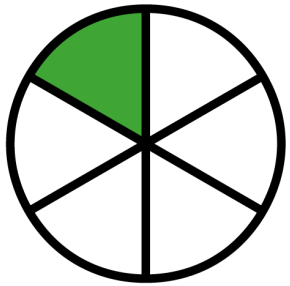
6b

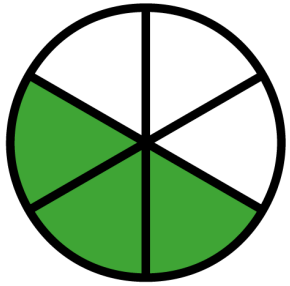
$\frac{1}{3} = 0.3\dot{3} = 33.\dot{3}\% =$ 

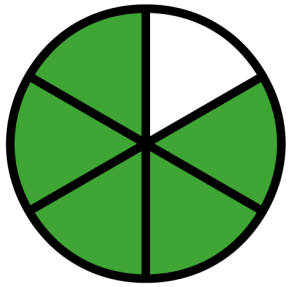
$\frac{2}{3} = 0.6\dot{6} = 66.\dot{6}\% =$ 

FH: Common FDP Equivalences

6c

$\frac{1}{6} = 0.1\dot{6} = 16.\dot{6}\% =$ 

$\frac{3}{6} = 0.5 = 50\% =$ 

$\frac{5}{6} = 0.8\dot{3} = 83.\dot{3}\% =$ 

FH: Common FDP Equivalences

6d

$\frac{1}{7} = 0.\overline{142857} = 14.\overline{285714}\% =$ 

$\frac{2}{7} = 0.\overline{285714} = 28.\overline{571428}\% =$ 

$\frac{3}{7} = 0.\overline{428571} = 42.\overline{857142}\% =$ 

$\frac{4}{7} = 0.\overline{571428} = 57.\overline{142857}\% =$ 

$\frac{5}{7} = 0.\overline{714285} = 71.\overline{428571}\% =$ 

$\frac{6}{7} = 0.\overline{857142} = 85.\overline{714285}\% =$ 

FH: Common FDP Equivalences

6e

1 1.0 100%					
$\frac{1}{3}$ 0.3̇ 33.3̇%		$\frac{1}{3}$ 0.3̇ 33.3̇%		$\frac{1}{3}$ 0.3̇ 33.3̇%	
$\frac{1}{6}$ 0.16̇ 16.6̇%	$\frac{1}{6}$ 0.16̇ 16.6̇%	$\frac{1}{6}$ 0.16̇ 16.6̇%	$\frac{1}{6}$ 0.16̇ 16.6̇%	$\frac{1}{6}$ 0.16̇ 16.6̇%	$\frac{1}{6}$ 0.16̇ 16.6̇%

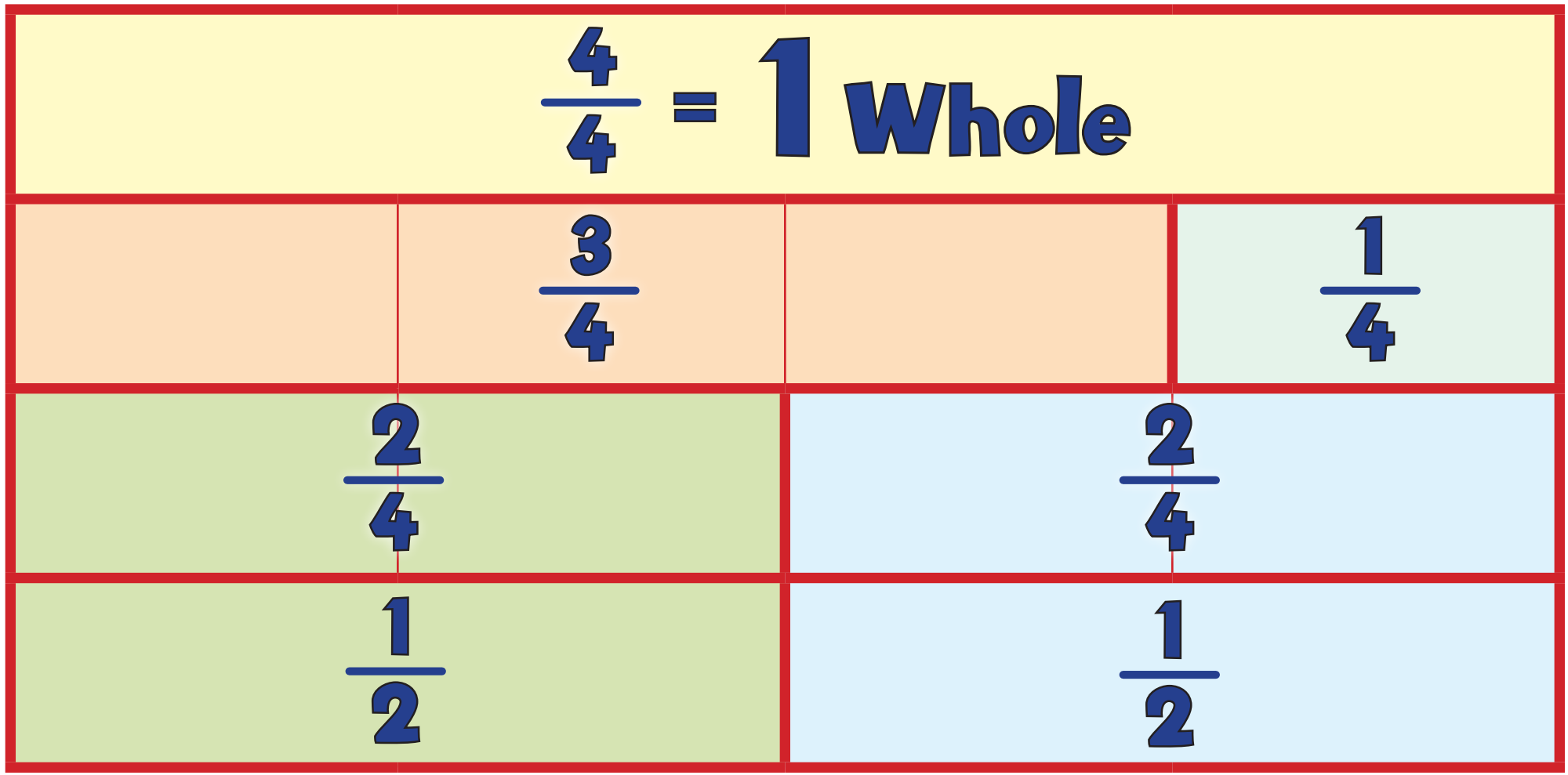
FH: Common FDP Equivalences

6f

1 1.0 100%						
$\frac{1}{7}$ 0.143 14.3%	$\frac{1}{7}$ 0.143 14.3%	$\frac{1}{7}$ 0.143 14.3%	$\frac{1}{7}$ 0.143 14.3%	$\frac{1}{7}$ 0.143 14.3%	$\frac{1}{7}$ 0.143 14.3%	$\frac{1}{7}$ 0.143 14.3%
$\frac{1}{9}$ $0.1\dot{1}$ 11.1%	$\frac{1}{9}$ $0.1\dot{1}$ 11.1%	$\frac{1}{9}$ $0.1\dot{1}$ 11.1%	$\frac{1}{9}$ $0.1\dot{1}$ 11.1%	$\frac{1}{9}$ $0.1\dot{1}$ 11.1%	$\frac{1}{9}$ $0.1\dot{1}$ 11.1%	$\frac{1}{9}$ $0.1\dot{1}$ 11.1%	$\frac{1}{9}$ $0.1\dot{1}$ 11.1%	$\frac{1}{9}$ $0.1\dot{1}$ 11.1%

F1: Fractions to 1

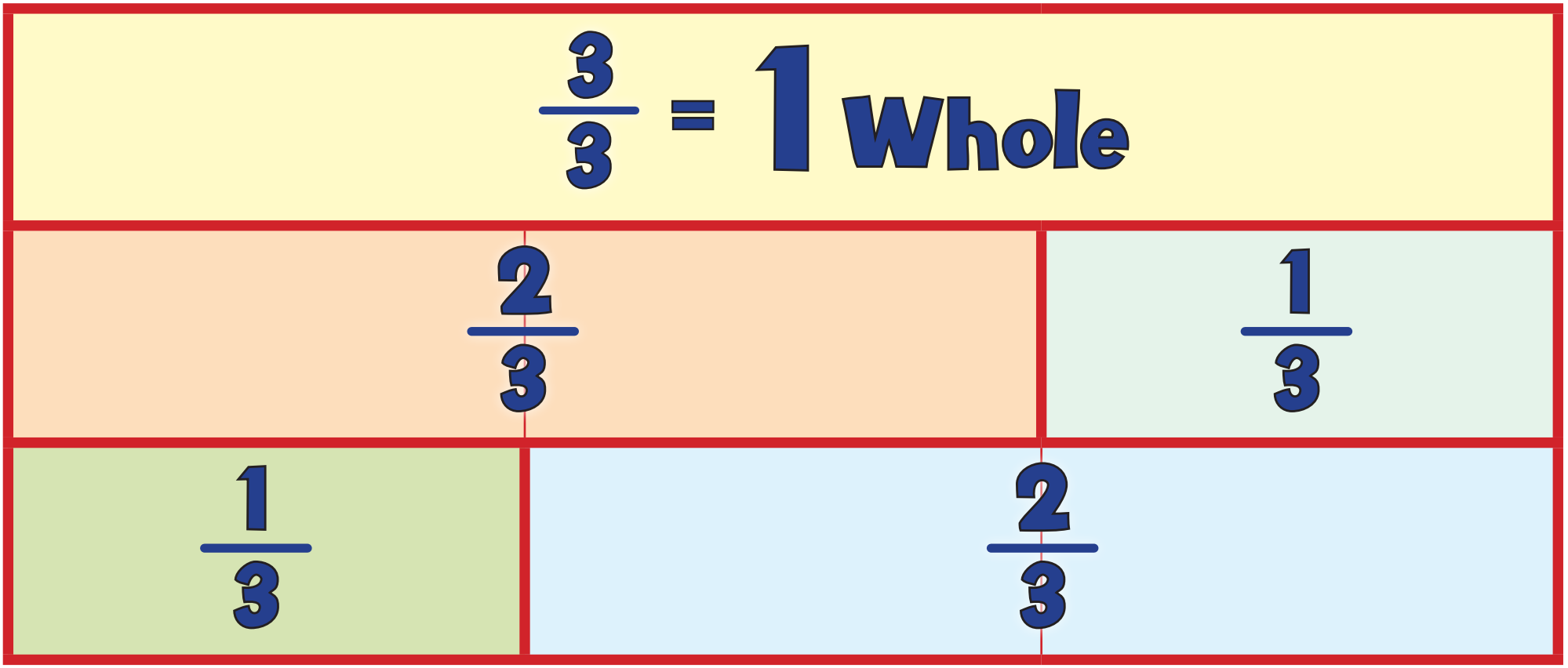
2a Halves and Quarters



F1: Fractions to 1

2b

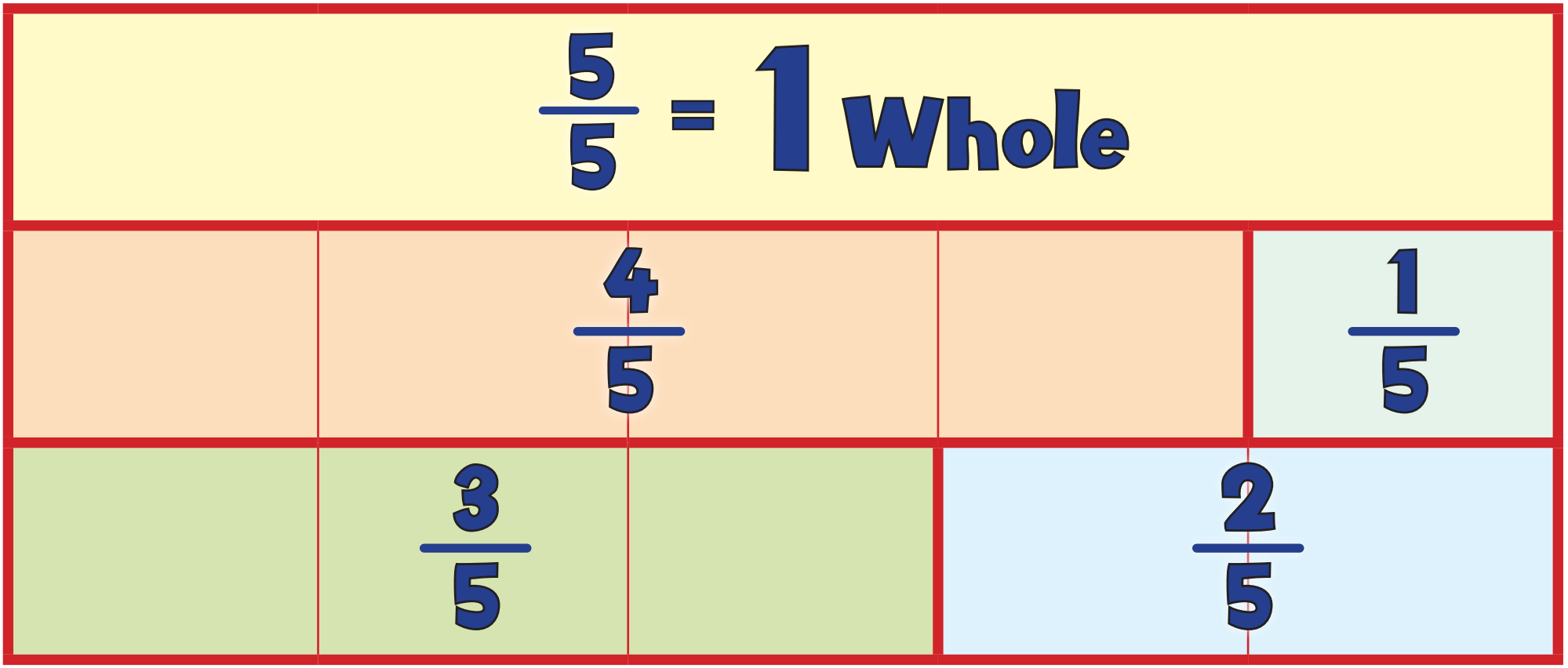
Thirds



F1: Fractions to 1

3a

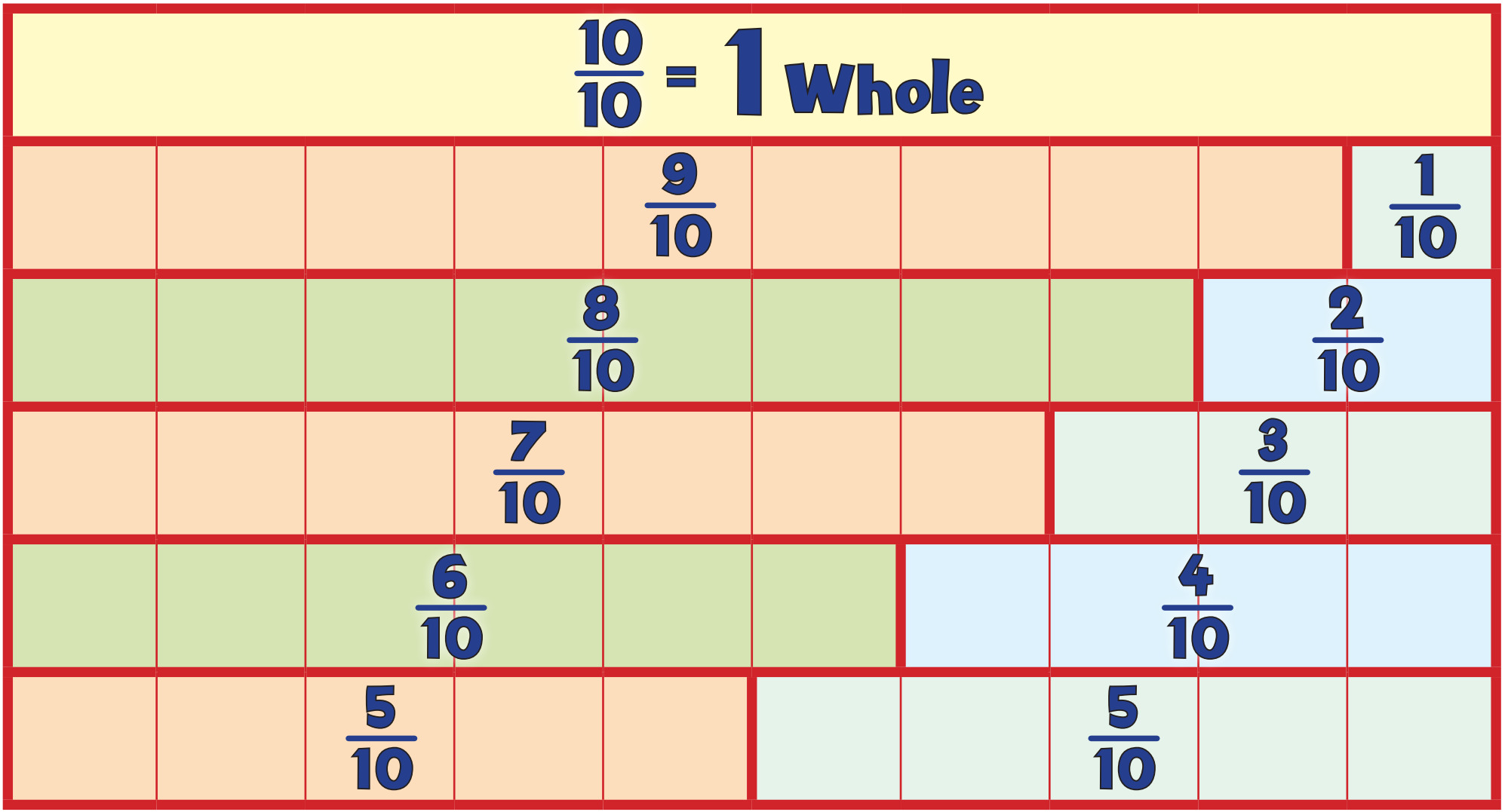
Fifths



F1: Fractions to 1

3b

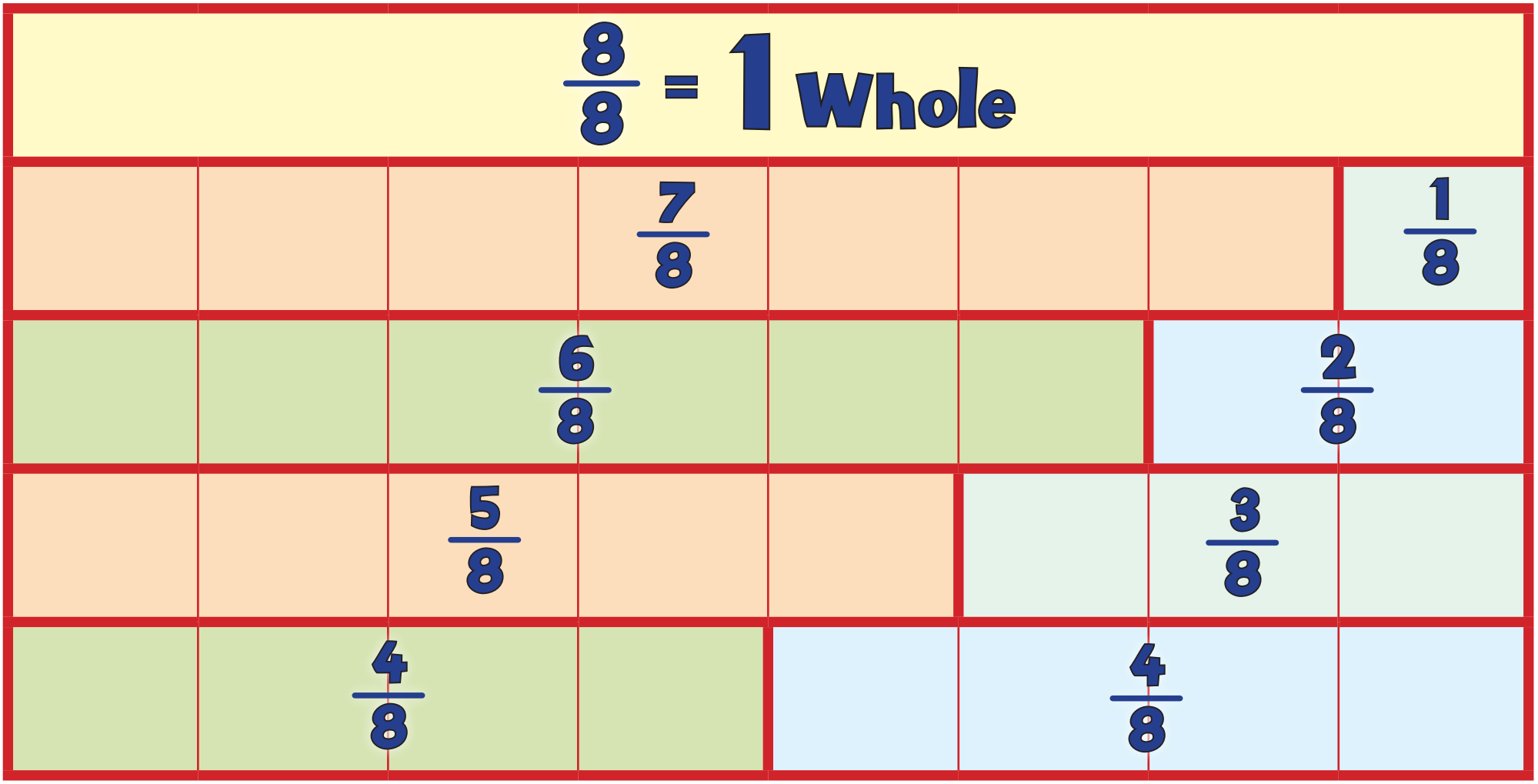
Tenths



F1: Fractions to 1

3c

Eighths

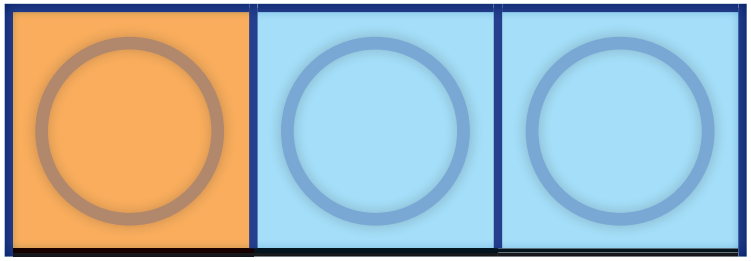


F1: Fractions to 1

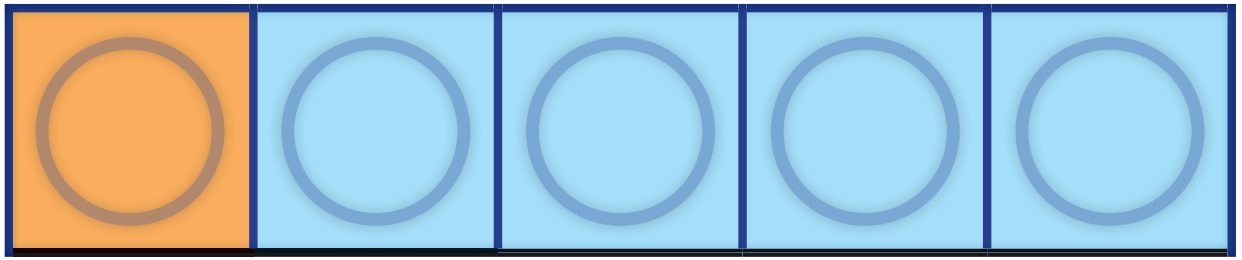
3d

Make a Whole!

$$\frac{1}{3} + \frac{2}{3}$$



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

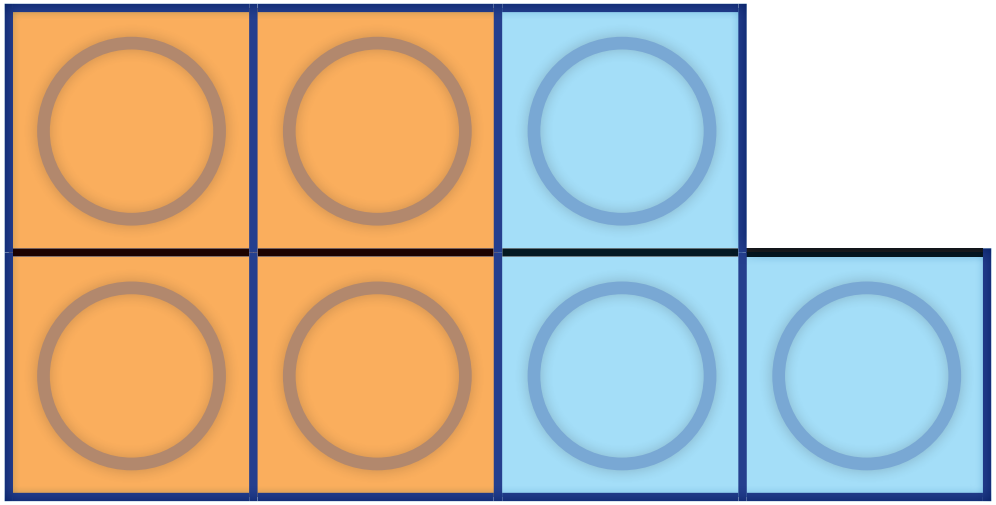


F1: Fractions to 1

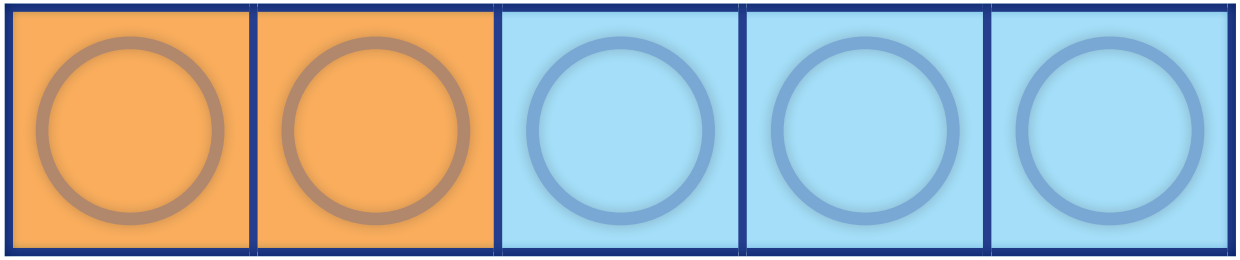
3e

Make a Whole!

$$\frac{4}{7} + \frac{3}{7}$$



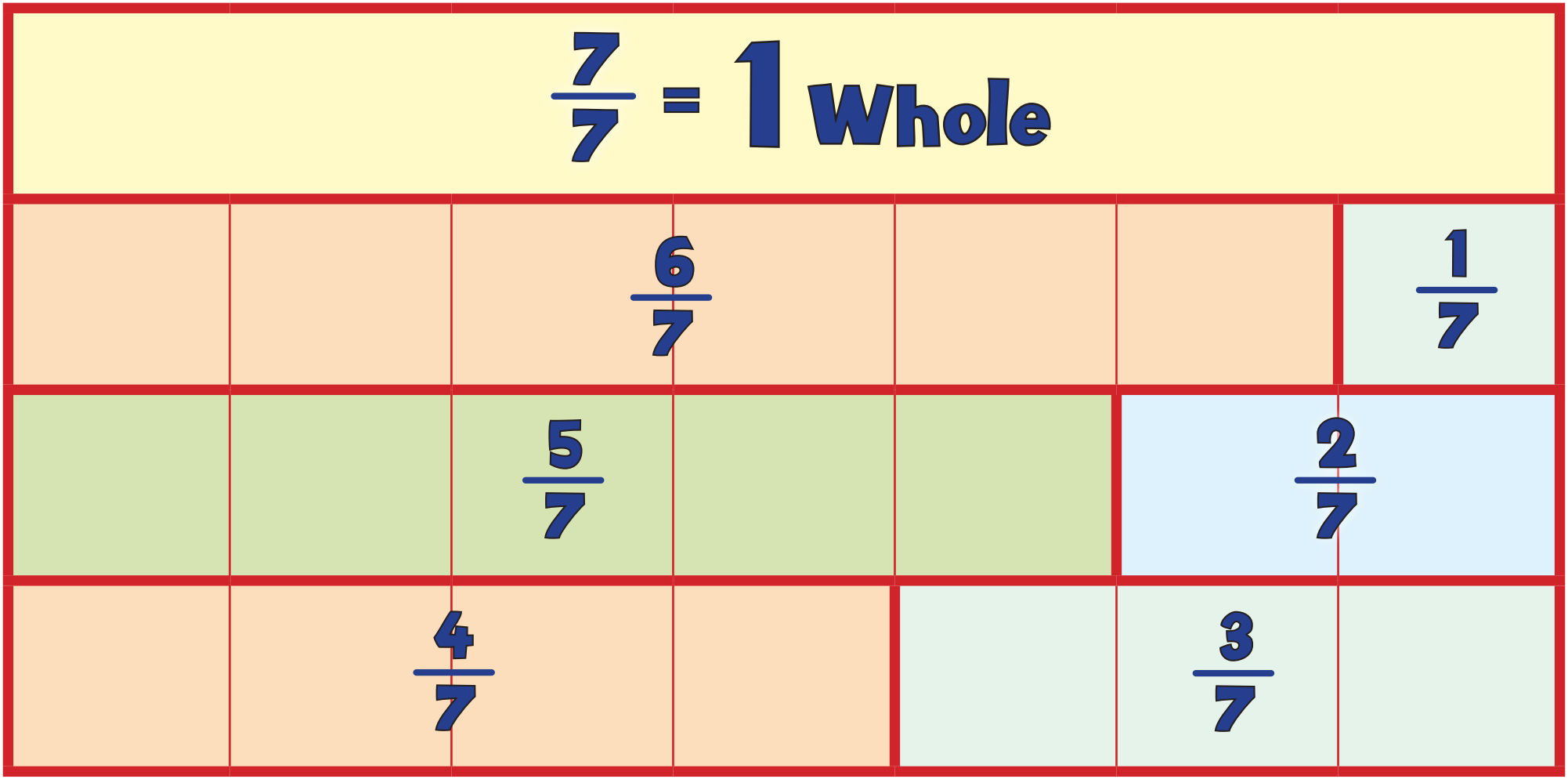
$$\frac{2}{5} + \frac{3}{5}$$



F1: Fractions to 1

4a

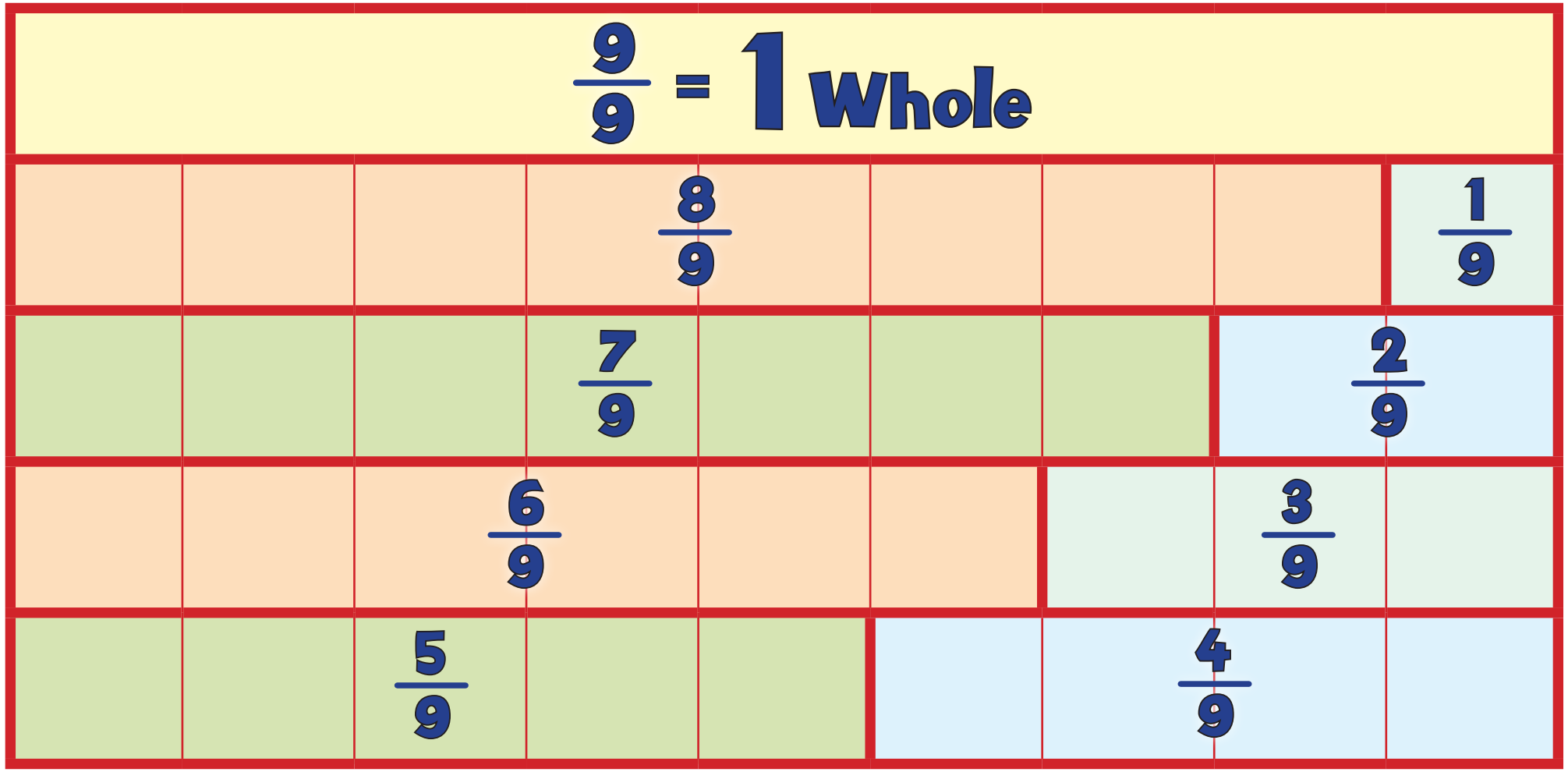
Sevenths



F1: Fractions to 1

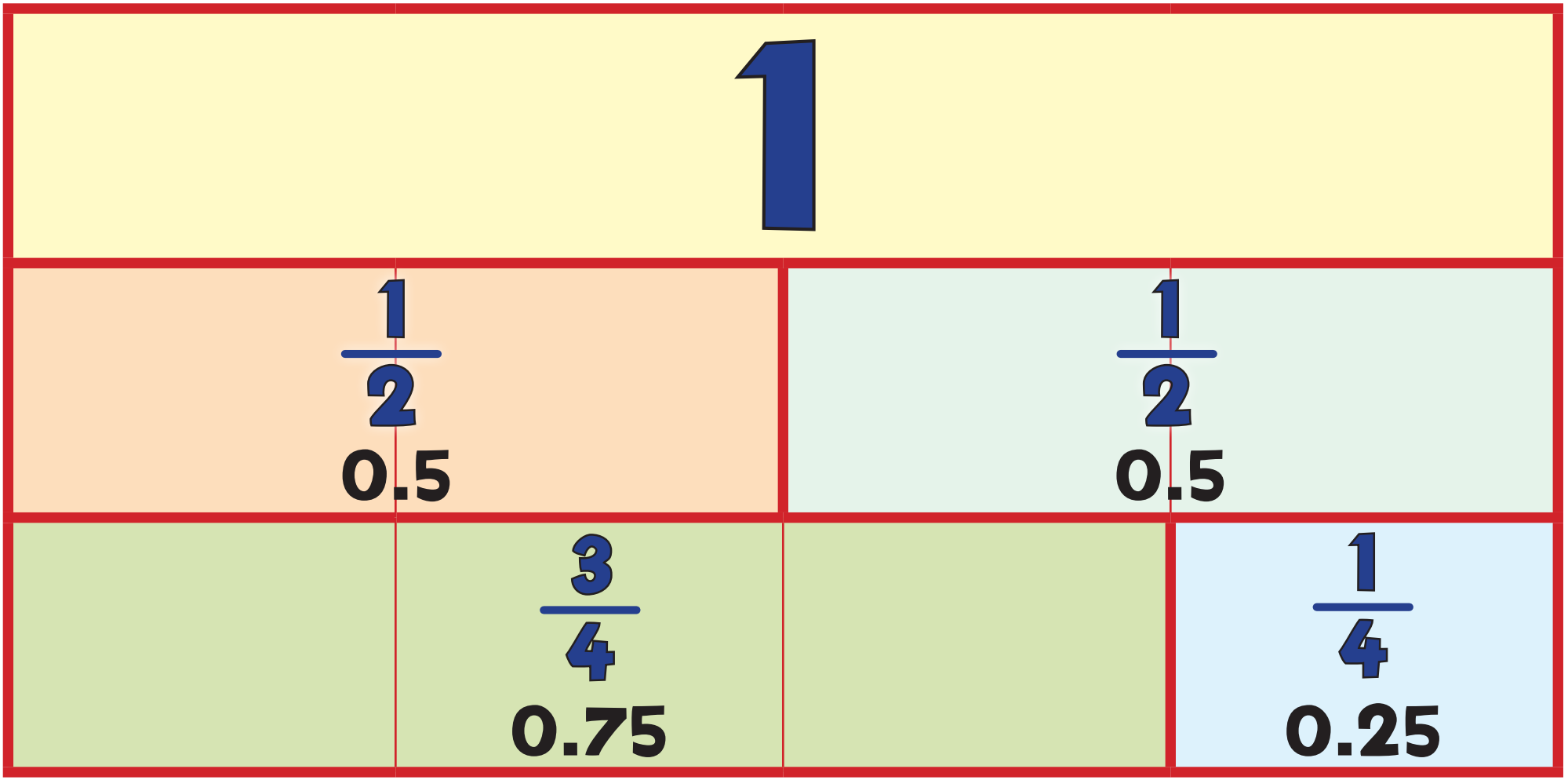
4b

Ninths



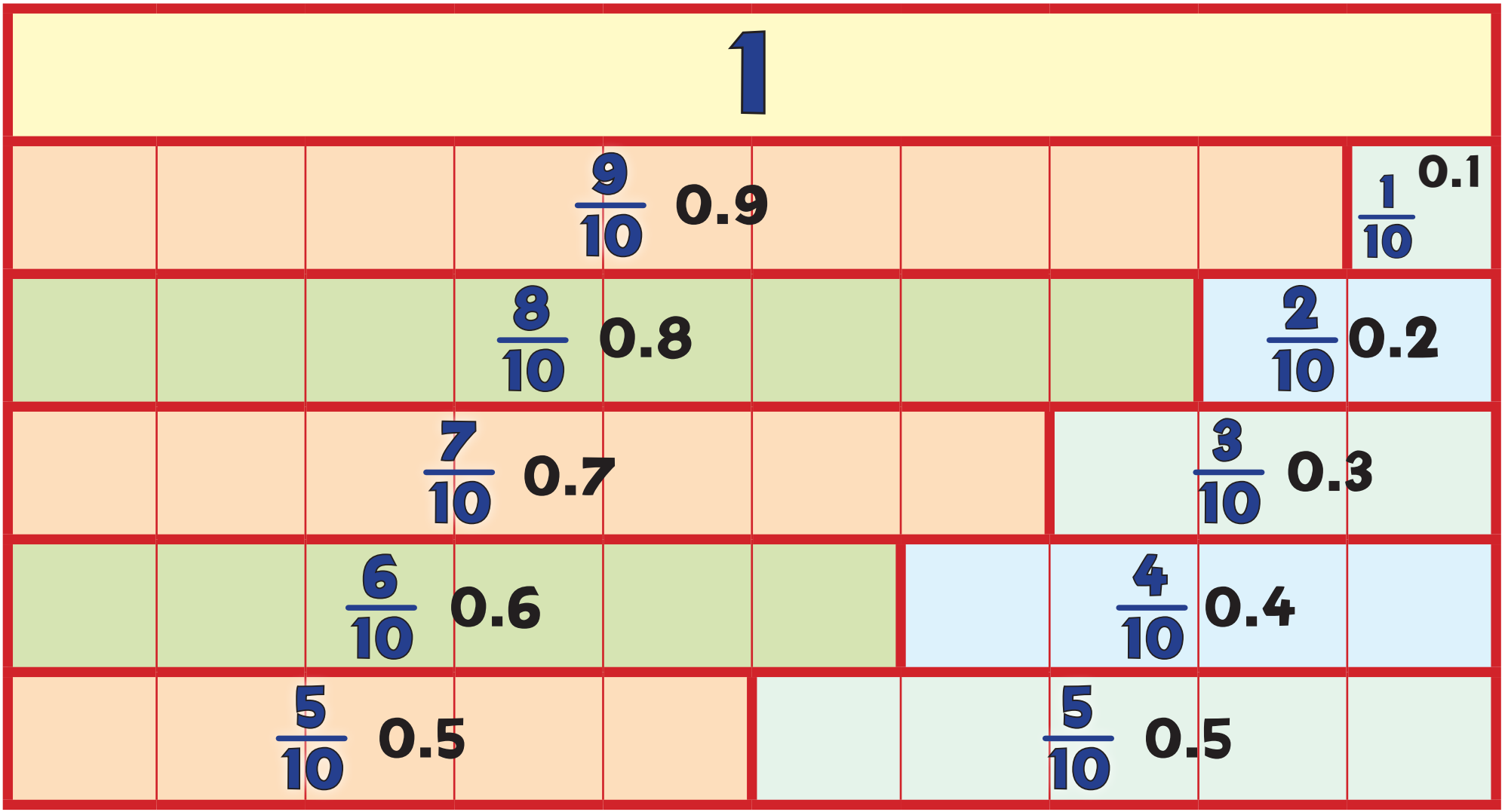
F1: Fractions to 1

4c Halves and Quarters



F1: Fractions to 1

4d Tenths

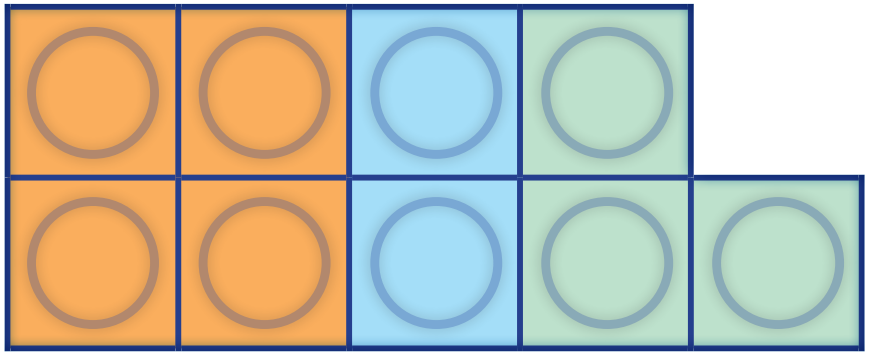


F1: Fractions to 1

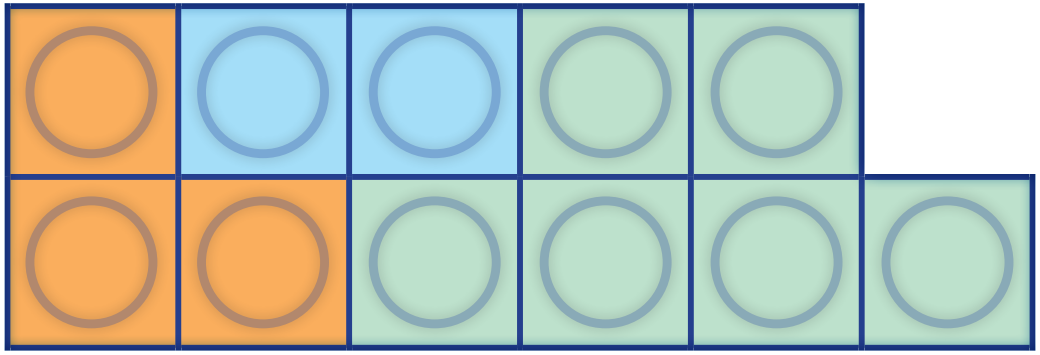
4e

Make a Whole!

$$\frac{4}{9} + \frac{2}{9} + \frac{3}{9}$$



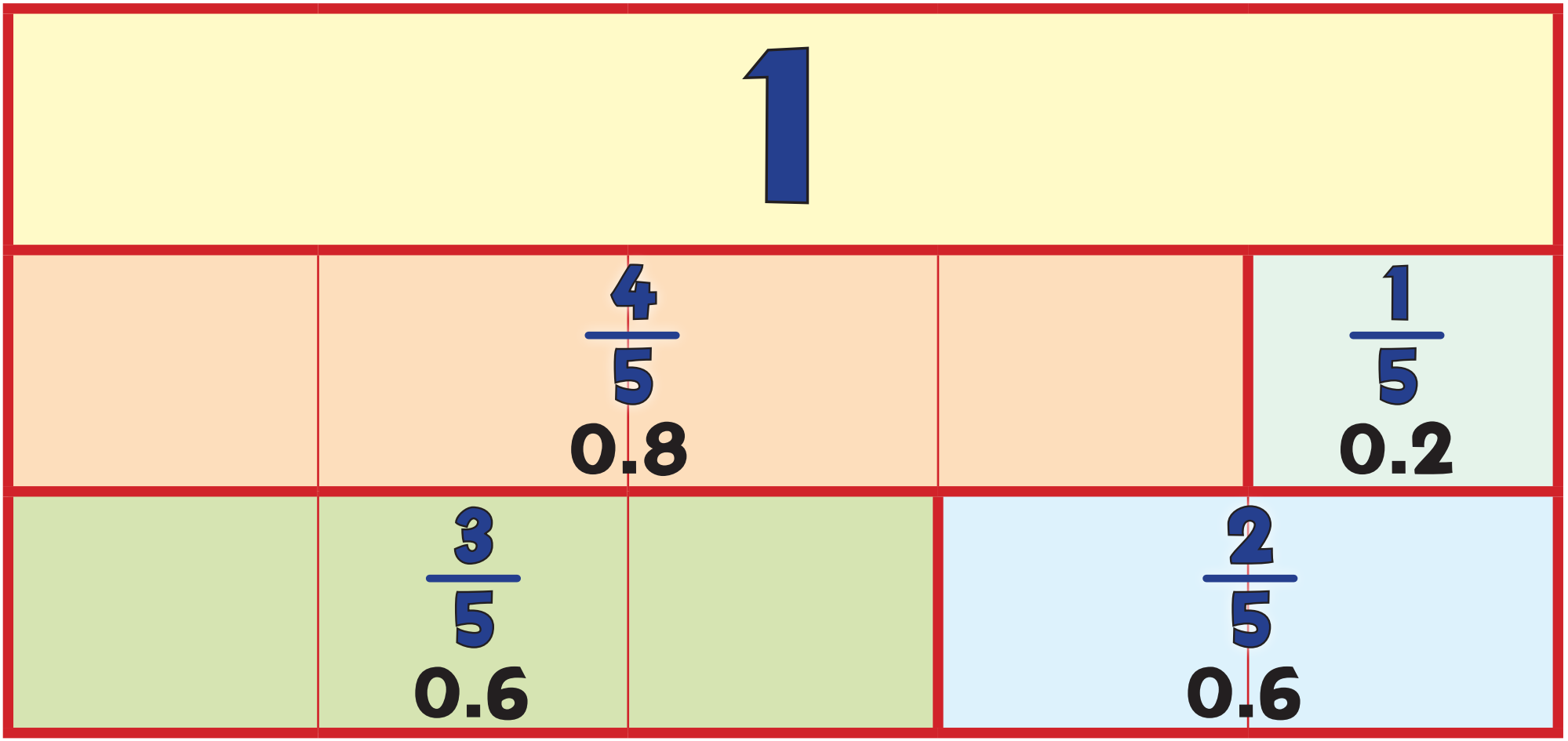
$$\frac{3}{11} + \frac{2}{11} + \frac{6}{11}$$



F1: Fractions to 1

5a

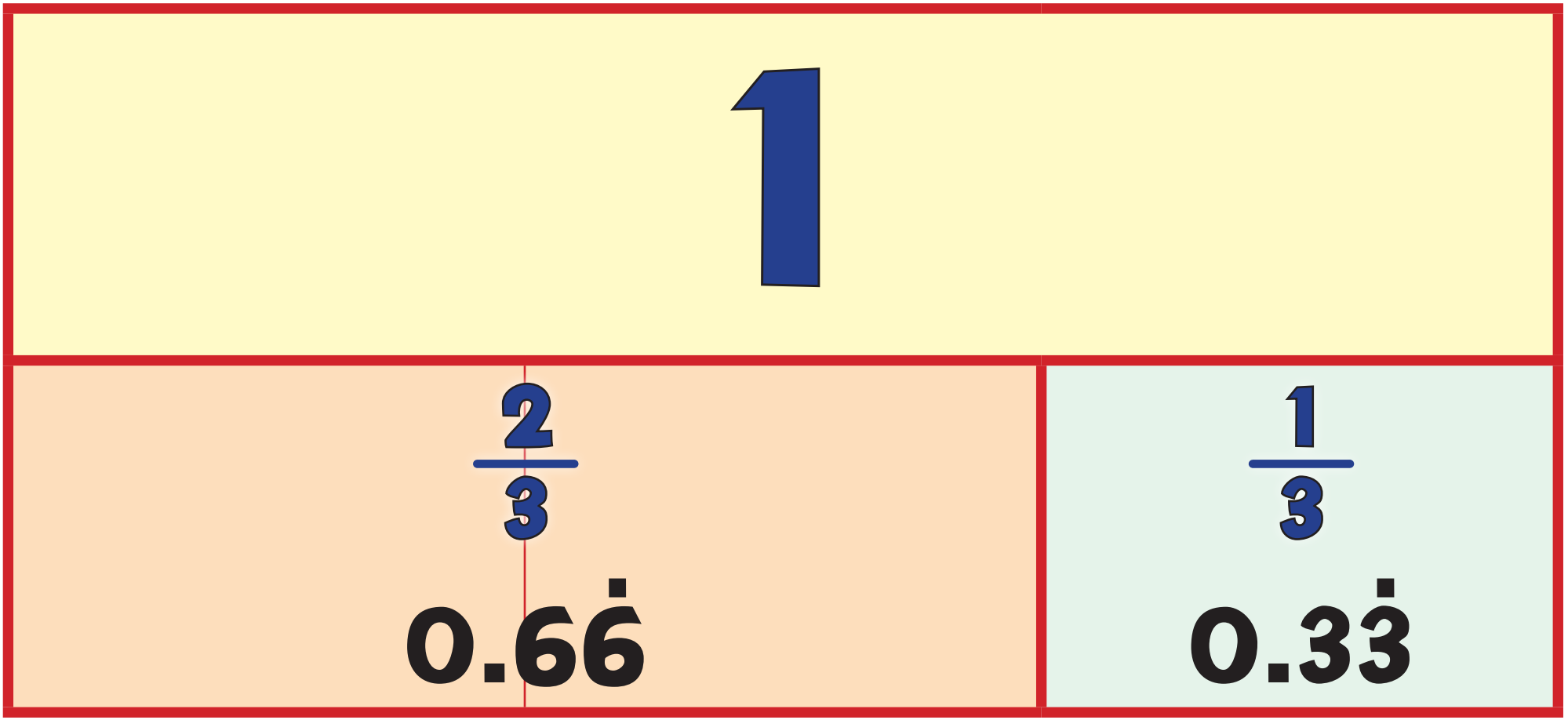
Fifths



F1: Fractions to 1

5b

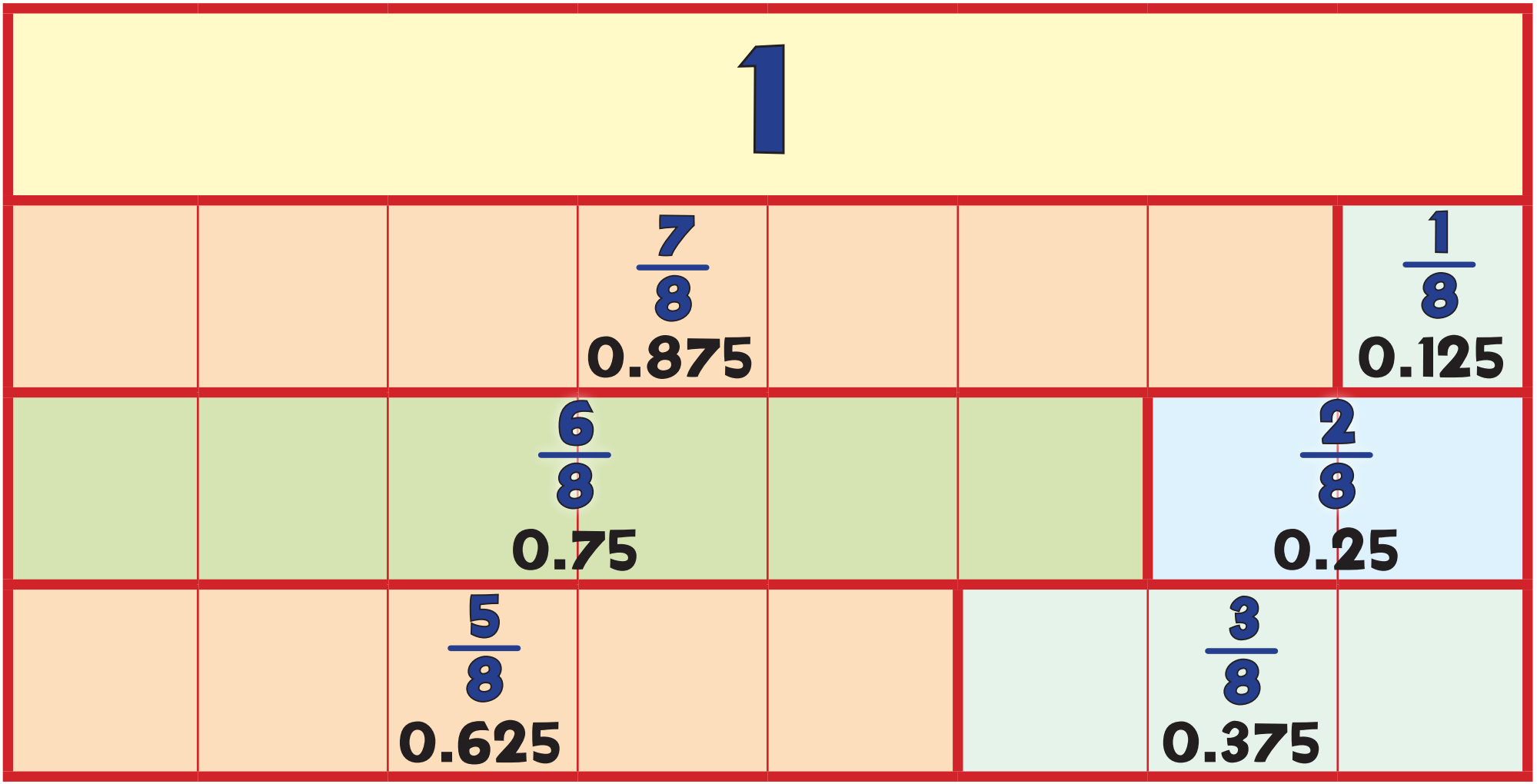
Thirds



F1: Fractions to 1

6

Eighths

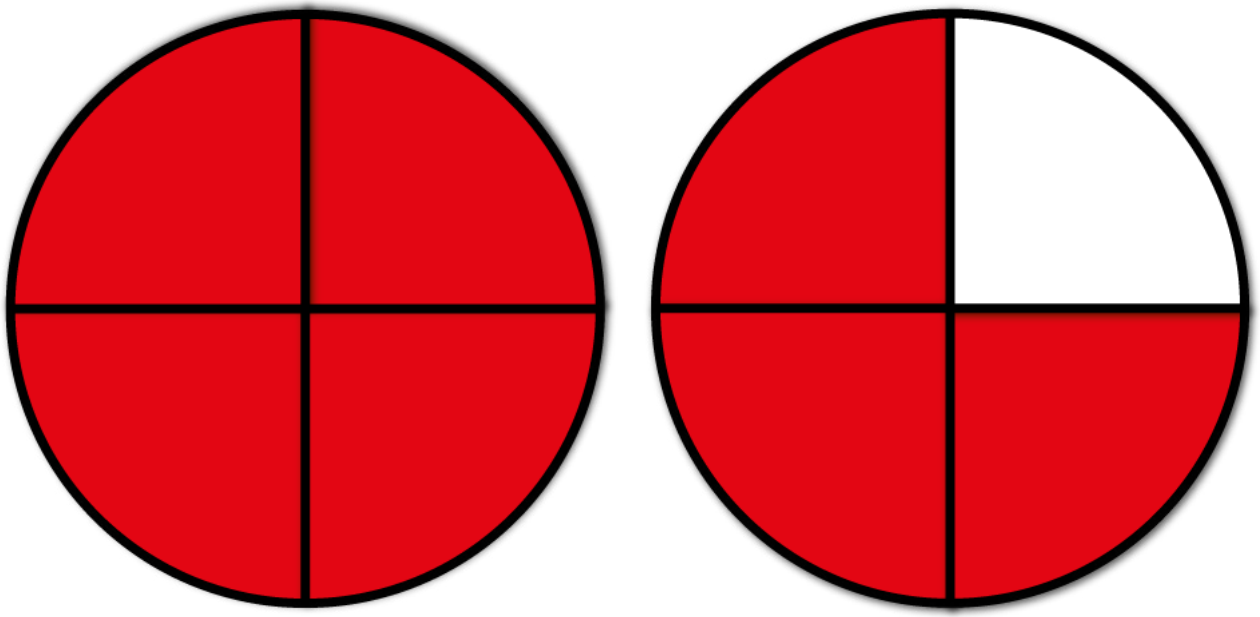


FJ: Fractions Greater than 1

2

$1\frac{3}{4}$

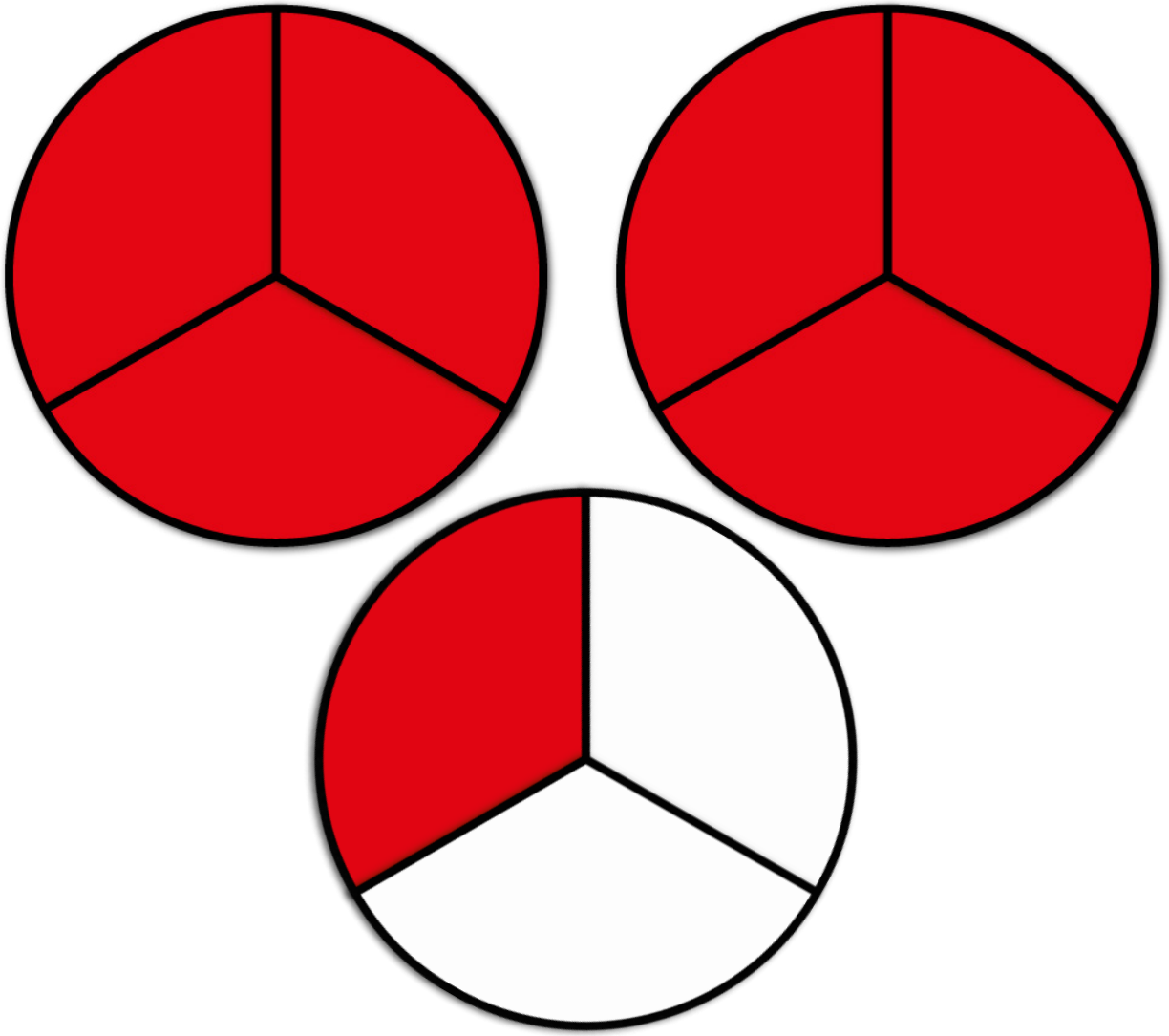
$\frac{7}{4}$



FJ3: Fractions Greater than 1

$2\frac{1}{3}$

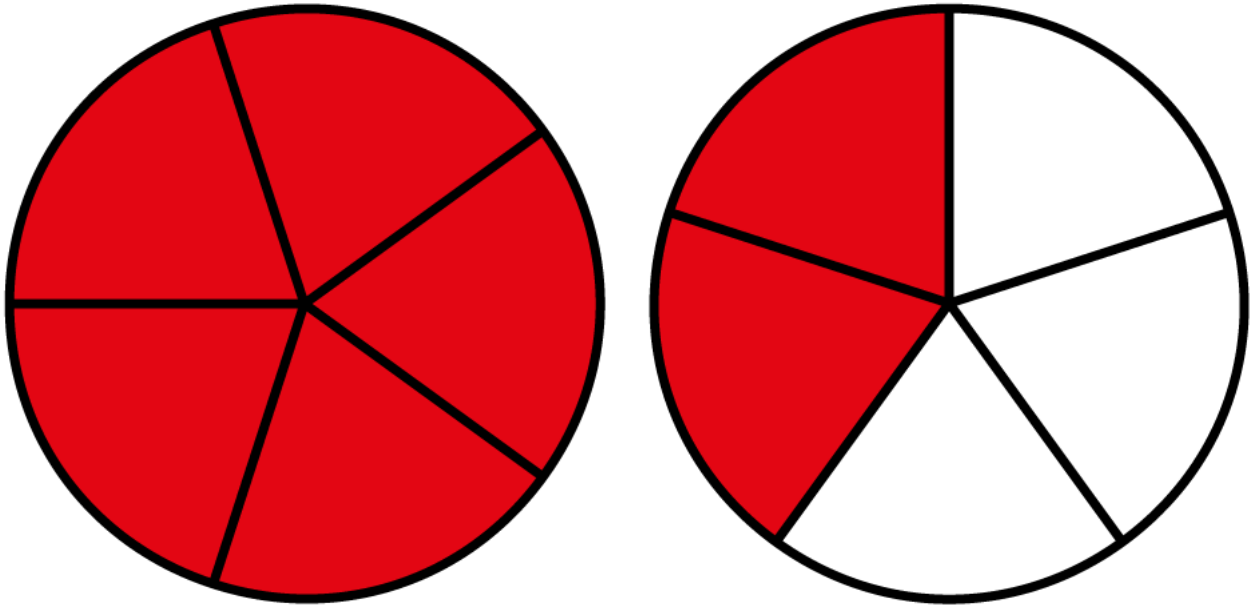
$\frac{7}{3}$



FJ4: Fractions Greater than 1

$1\frac{2}{5}$

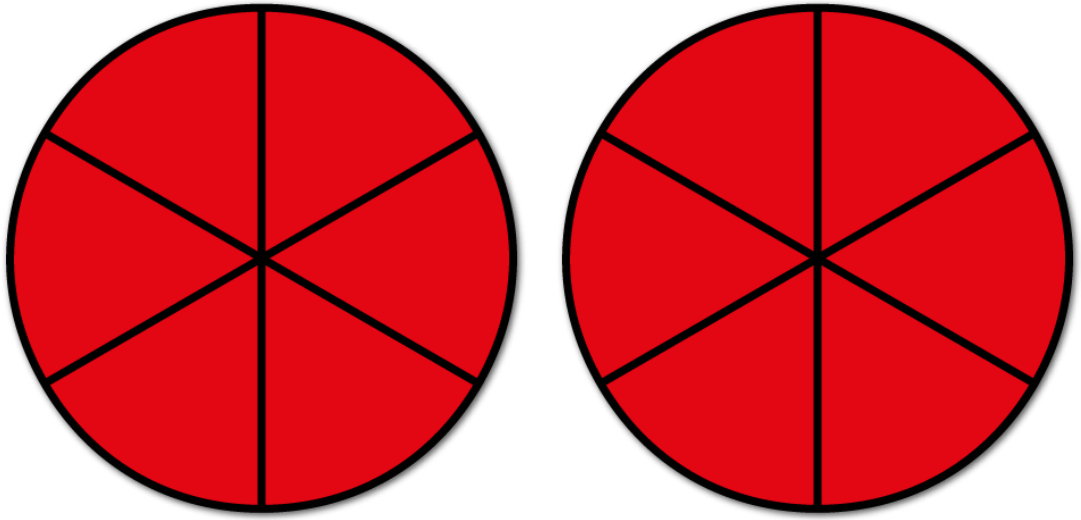
$\frac{7}{5}$



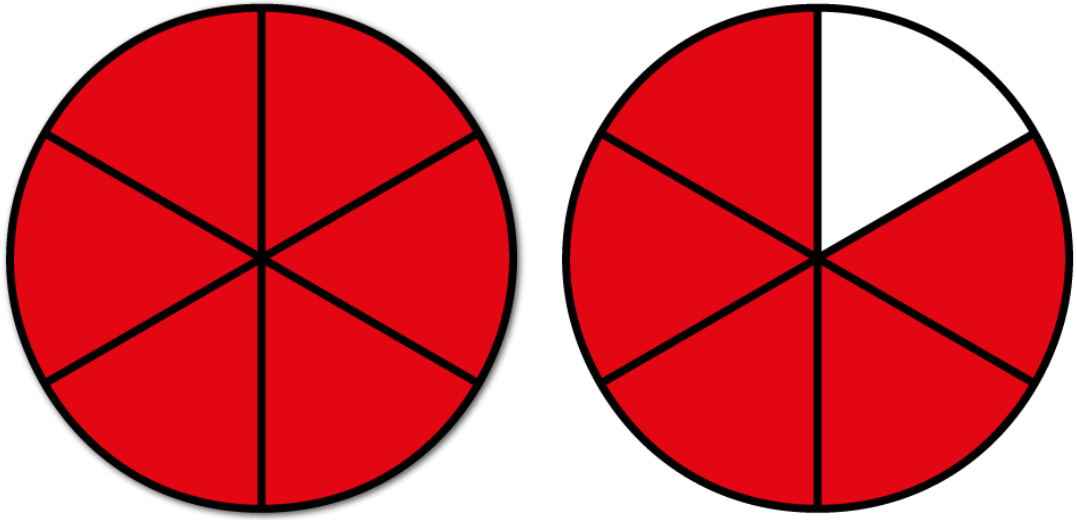
FJ: Fractions Greater than 1

5

$3\frac{5}{6}$



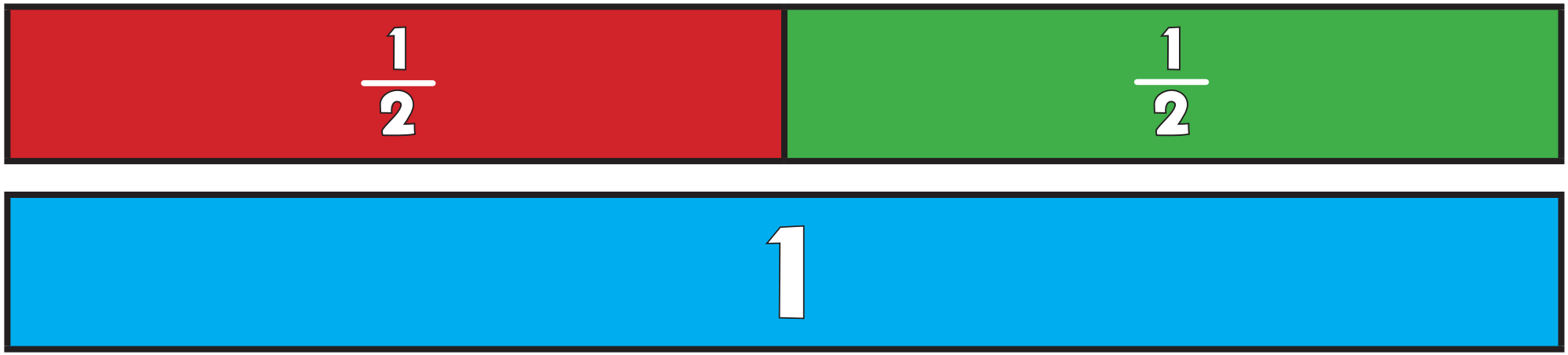
$\frac{23}{6}$



FK: Calculating with Fractions

1+

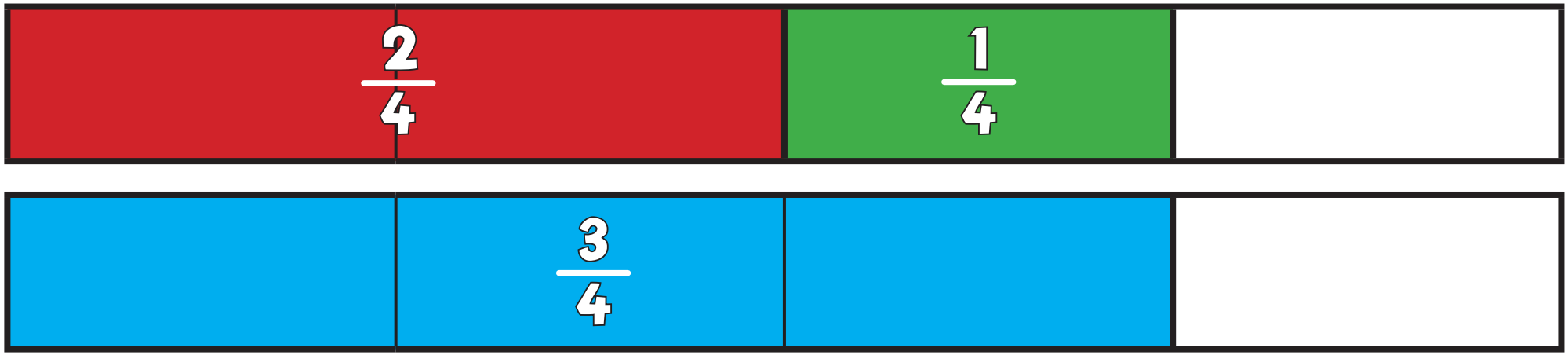
$$\frac{1}{2} + \frac{1}{2} = 1$$



FK: Calculating with Fractions

2+

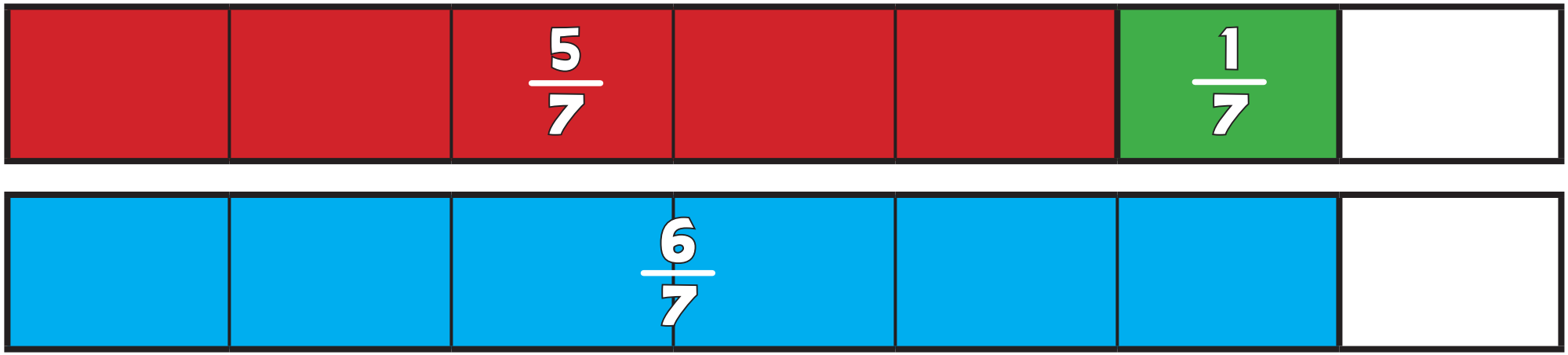
$$\frac{2}{4} + \frac{1}{4} = \frac{3}{4}$$



FK: Calculating with Fractions

3+

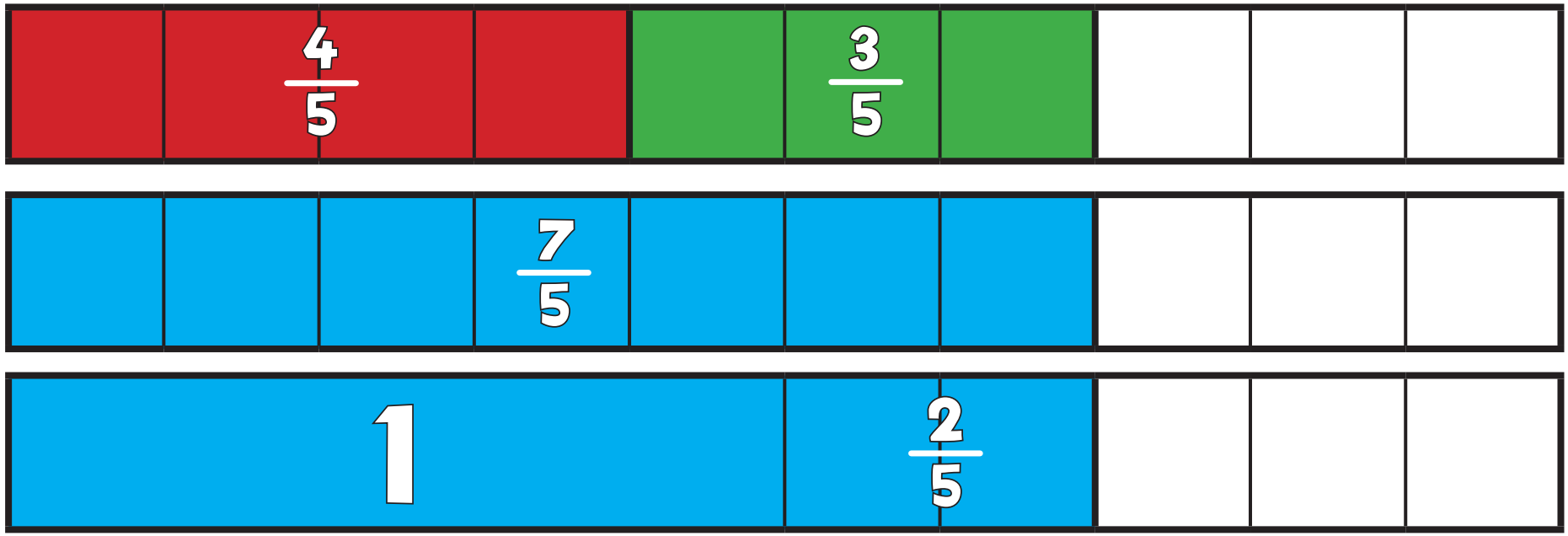
$$\frac{5}{7} + \frac{1}{7} = \frac{6}{7}$$



FK: Calculating with Fractions

4+

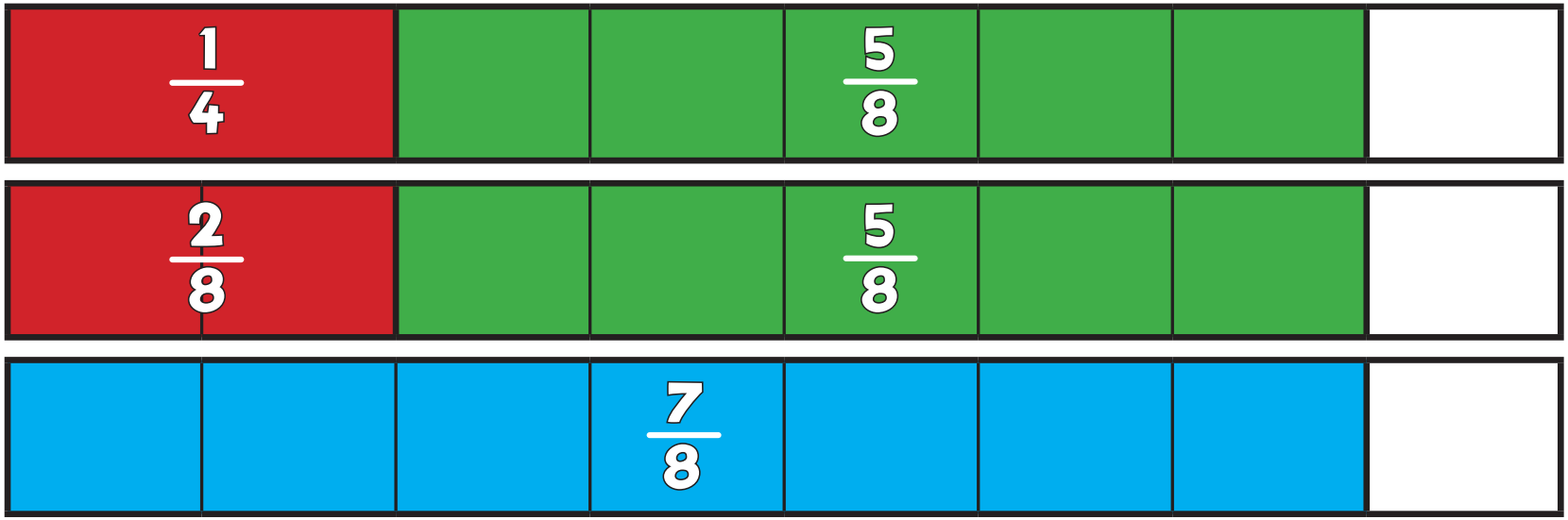
$$\frac{4}{5} + \frac{3}{5} = \frac{7}{5} = 1\frac{2}{5}$$



FK: Calculating with Fractions

5+

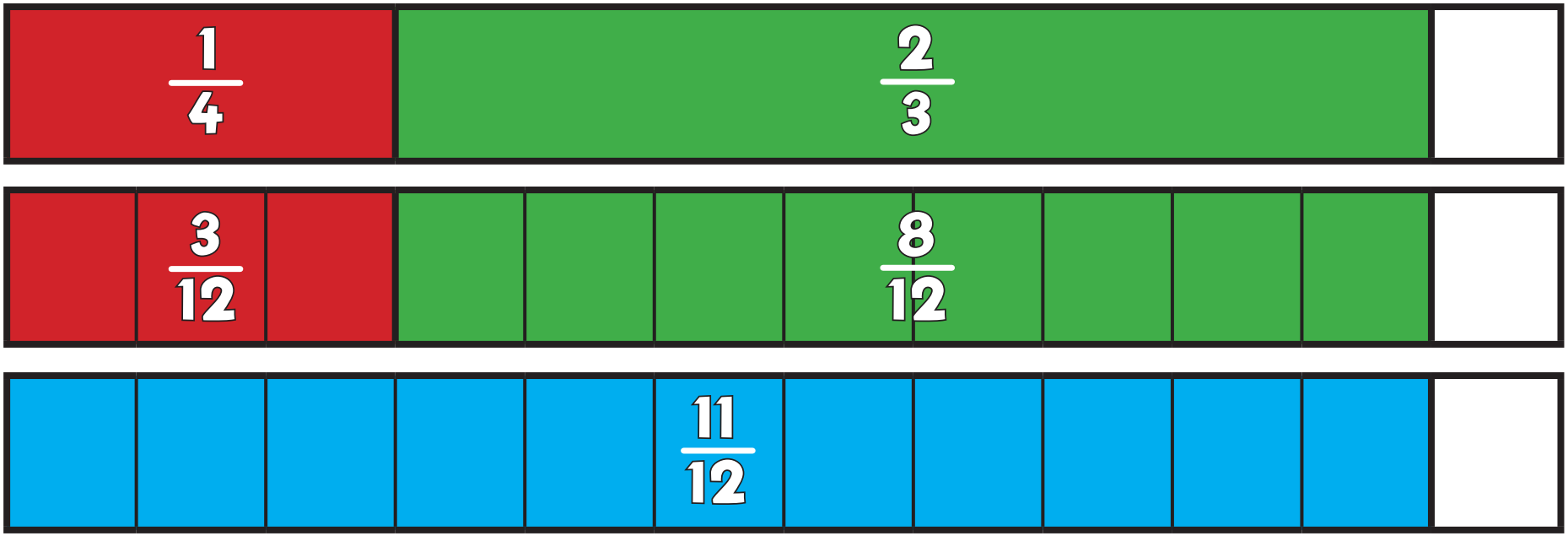
$$\frac{1}{4} + \frac{5}{8} = \frac{2}{8} + \frac{5}{8} = \frac{7}{8}$$



FK: Calculating with Fractions

6+a

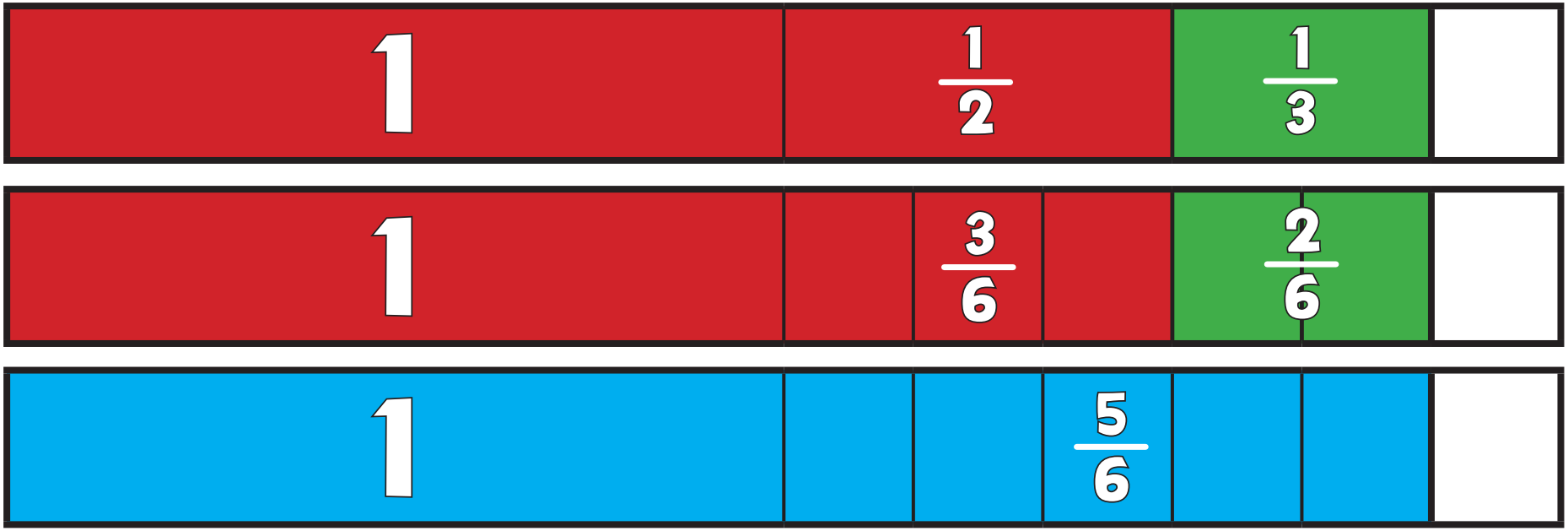
$$\frac{1}{4} + \frac{2}{3} = \frac{3}{12} + \frac{8}{12} = \frac{11}{12}$$



FK: Calculating with Fractions

6+b

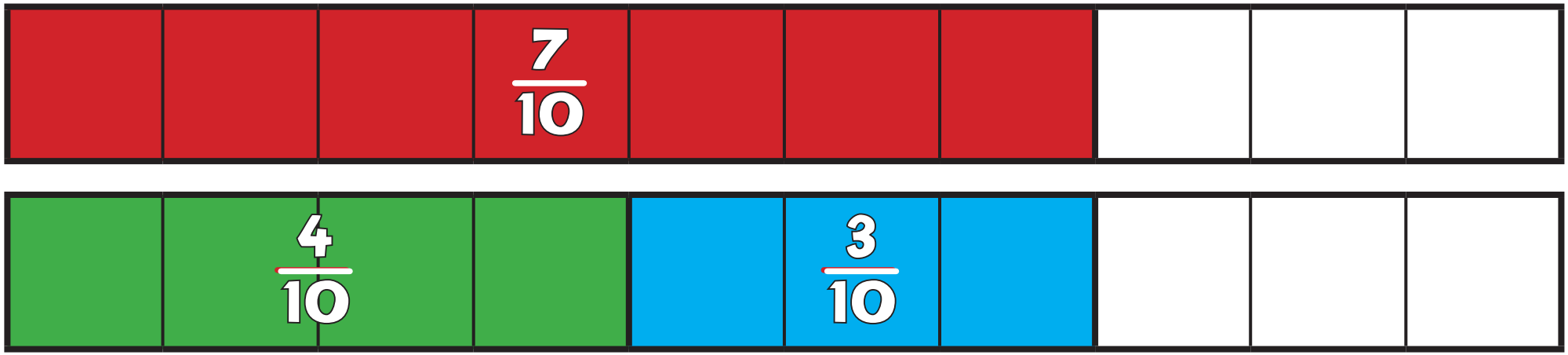
$$1\frac{1}{2} + \frac{1}{3} = 1\frac{3}{6} + \frac{2}{6} = 1\frac{5}{6}$$



FK: Calculating with Fractions

3-

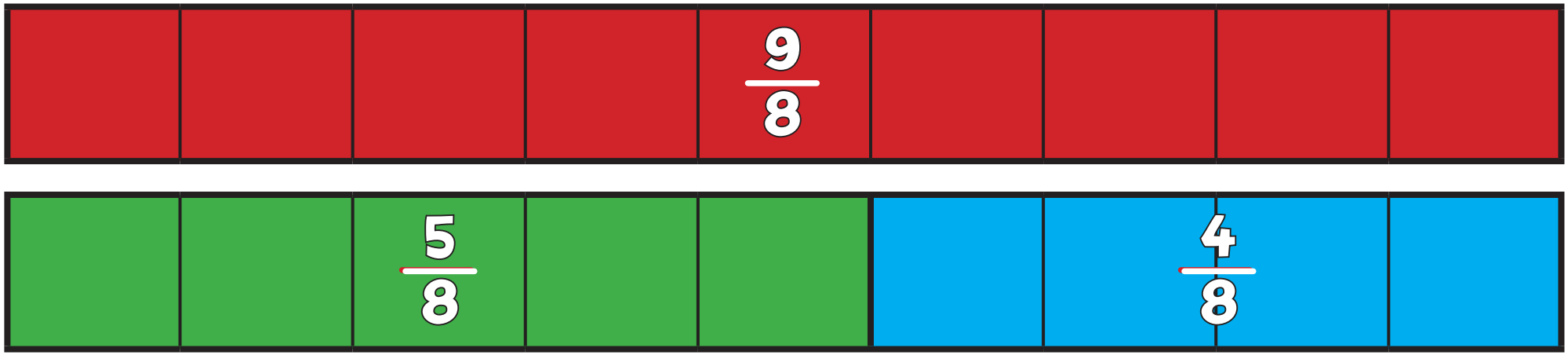
$$\frac{7}{10} - \frac{4}{10} = \frac{3}{10}$$



FK: Calculating with Fractions

4-

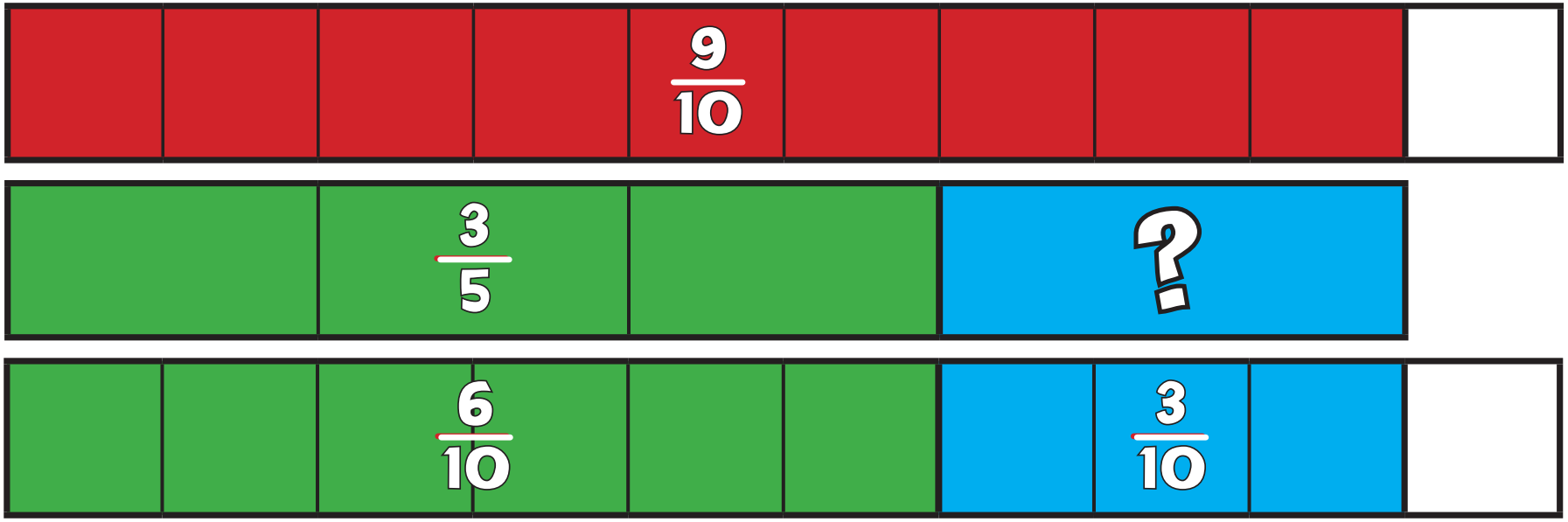
$$\frac{9}{8} - \frac{5}{8} = \frac{4}{8}$$



FK: Calculating with Fractions

5-

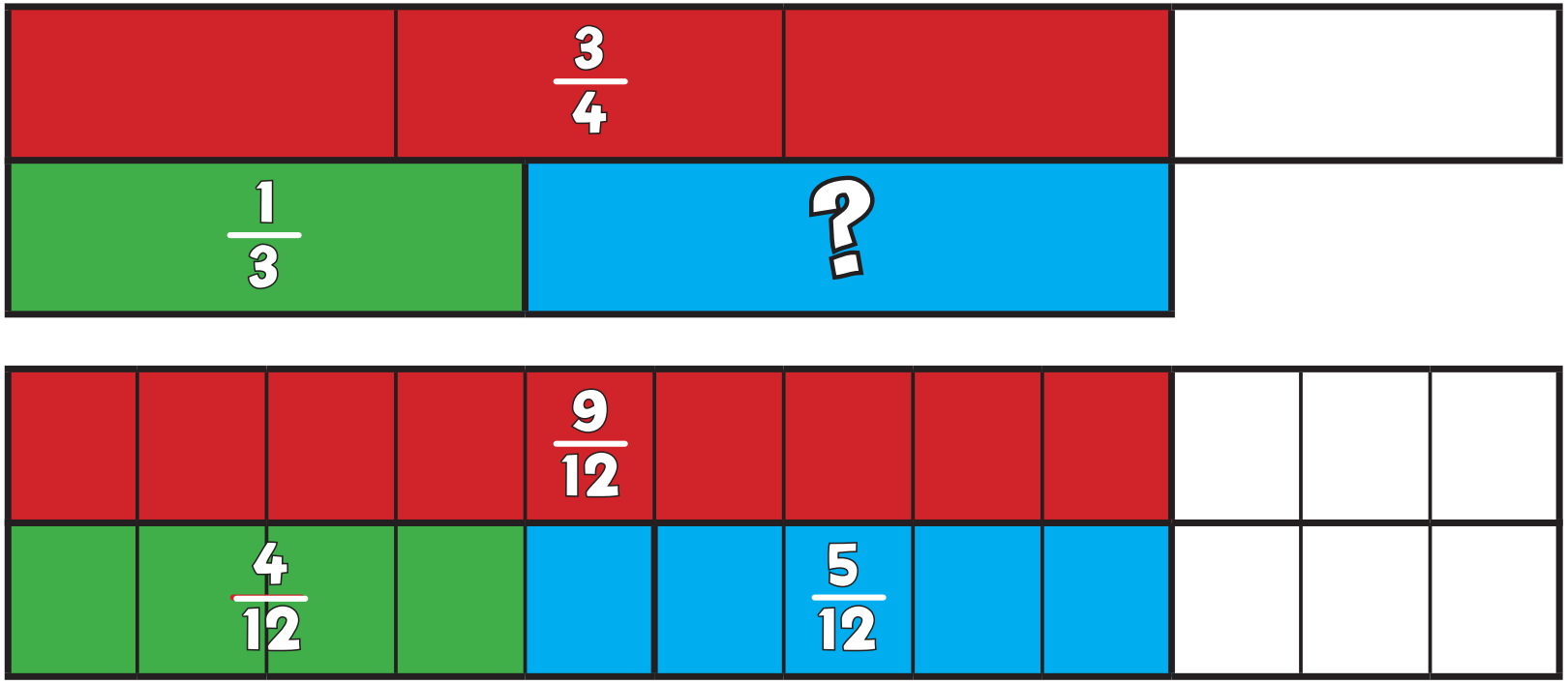
$$\frac{9}{10} - \frac{3}{5} = \frac{3}{10}$$



FK: Calculating with Fractions

6-a

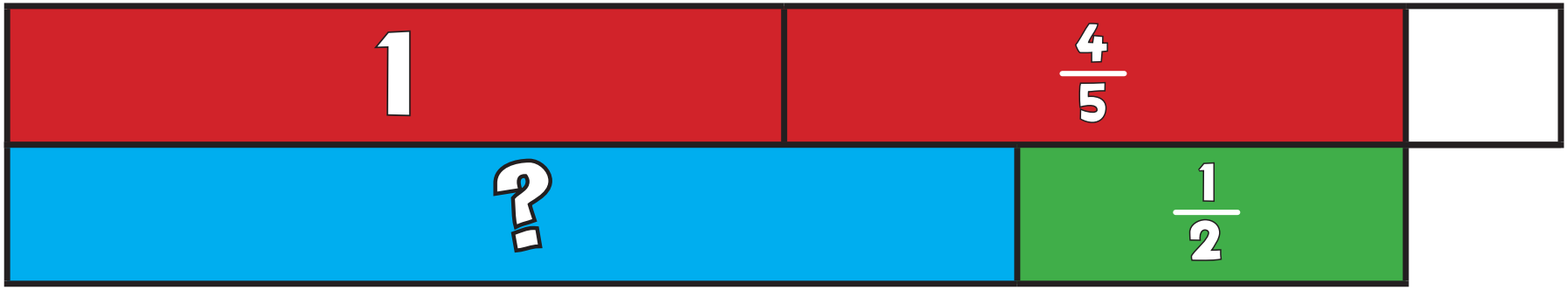
$$\frac{3}{4} - \frac{1}{3} = \frac{9}{12} - \frac{4}{12} = \frac{5}{12}$$

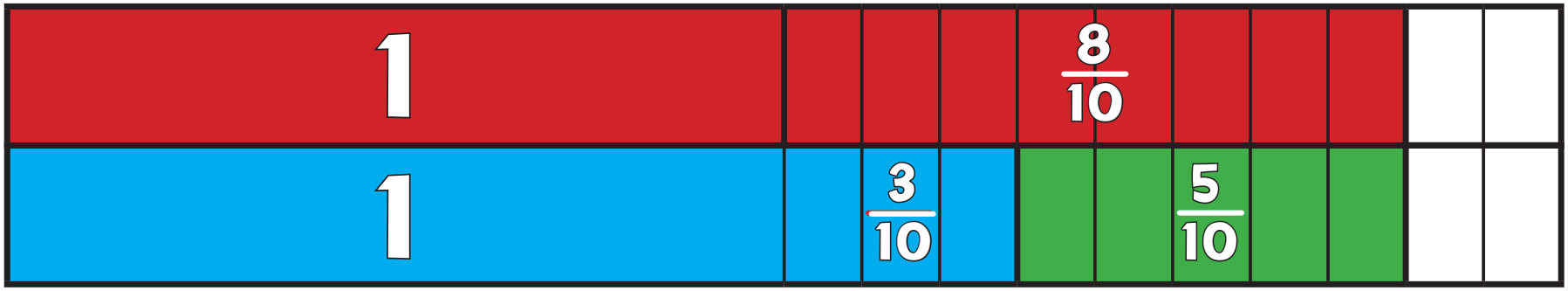


FK: Calculating with Fractions

6-b

$$1\frac{4}{5} - \frac{1}{2} = 1\frac{8}{10} - \frac{5}{10} = 1\frac{3}{10}$$

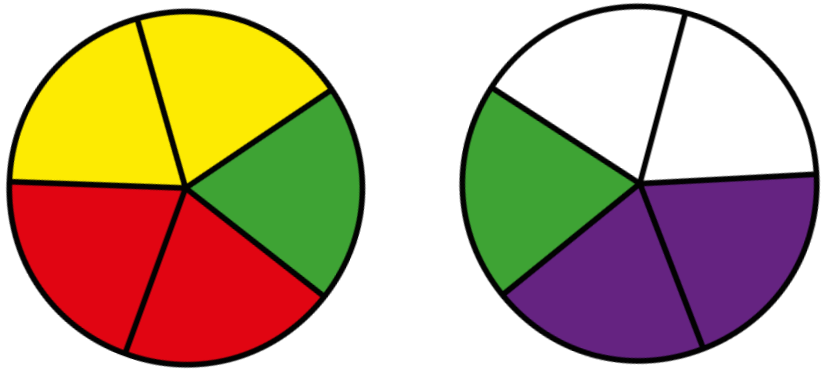




FK: Calculating with Fractions

5xa

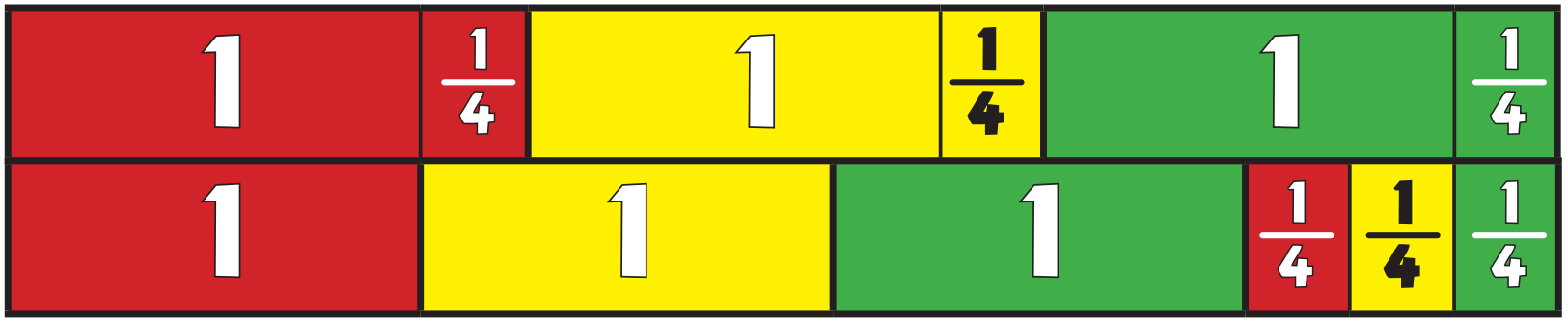
$$\frac{2}{5} \times 4 = \frac{8}{5} = 1\frac{3}{5}$$

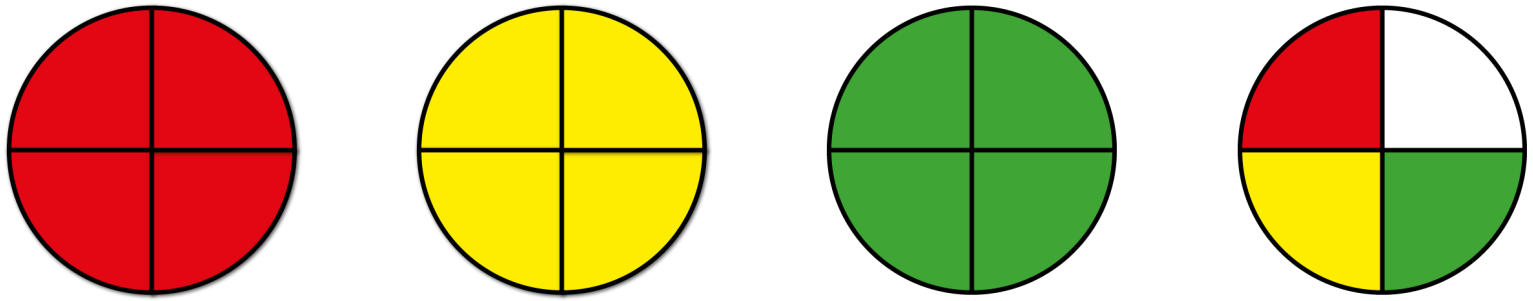


FK: Calculating with Fractions

5xb

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





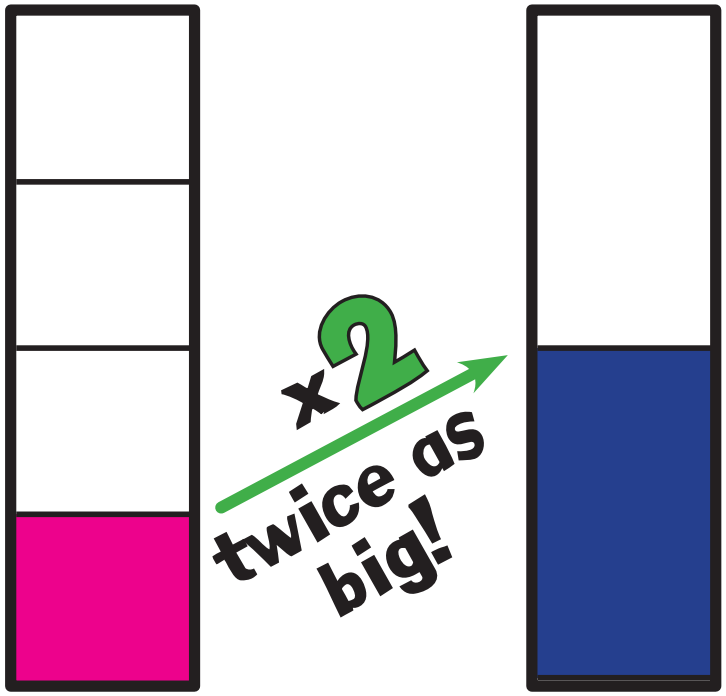
FK: Calculating with Fractions

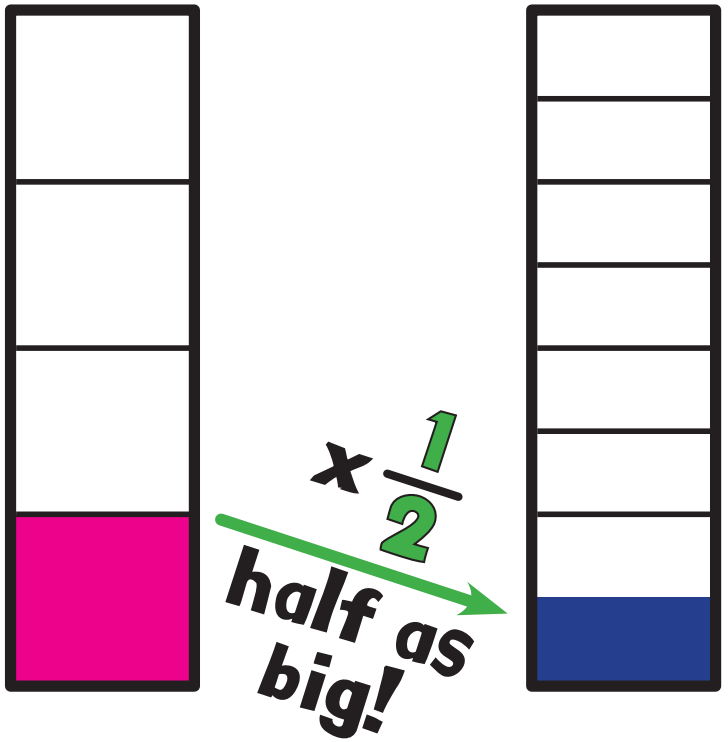
6xa

Scaling Model

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

$$\frac{1}{4} \times \frac{1}{2} = \frac{1}{8}$$



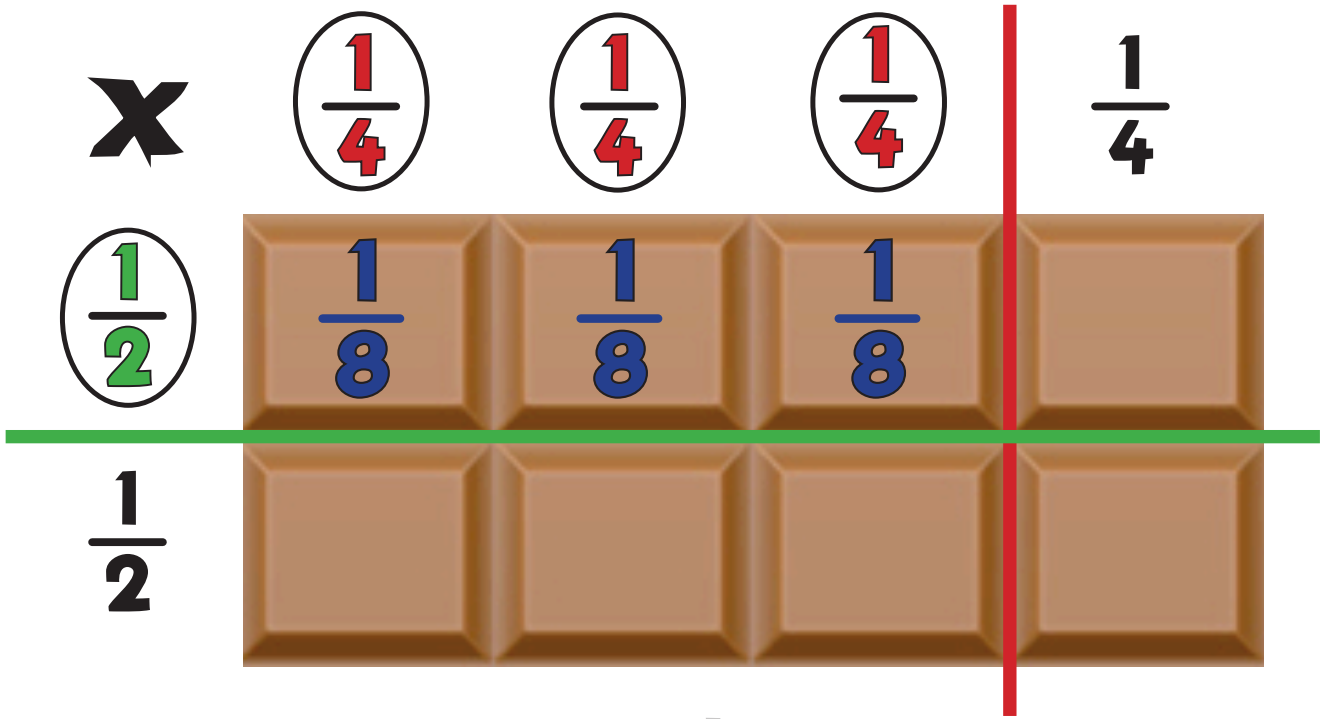


FK: Calculating with Fractions

6xb

"If I had three quarters of a chocolate bar, and gave you half of what I had, how much of the whole bar would you get? Answer: Three eighths."

$$\frac{3}{4} \times \frac{1}{2} = \frac{3}{8}$$



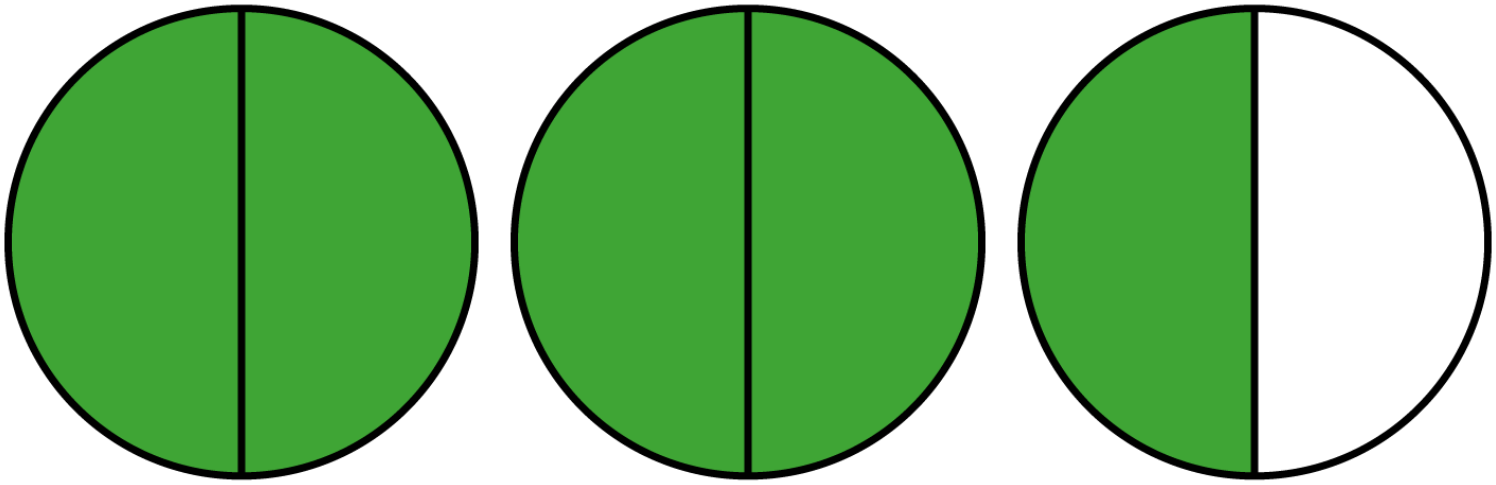
FK: Calculating with Fractions

5÷a

Grouping Model - Dividing by a Fraction

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

"How many halves can I fit into a 2 and a half?
Answer: 5."



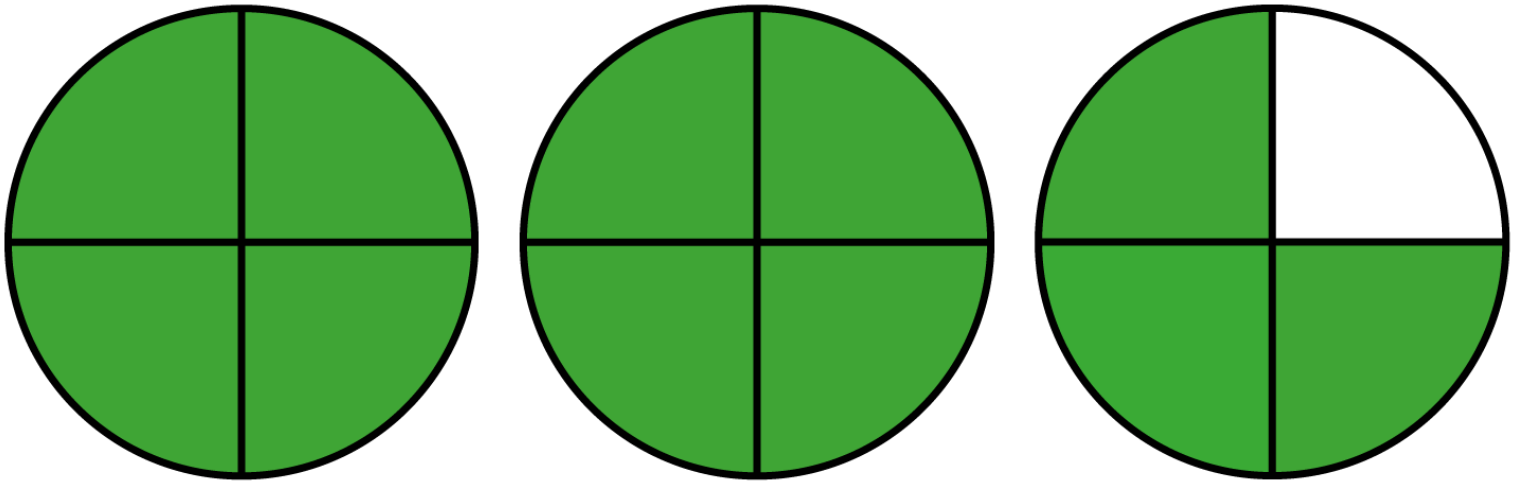
FK: Calculating with Fractions

5÷b

Grouping Model - Dividing by a Fraction

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

"How many quarters can I fit into a 2 and a quarter?
Answer: 9."



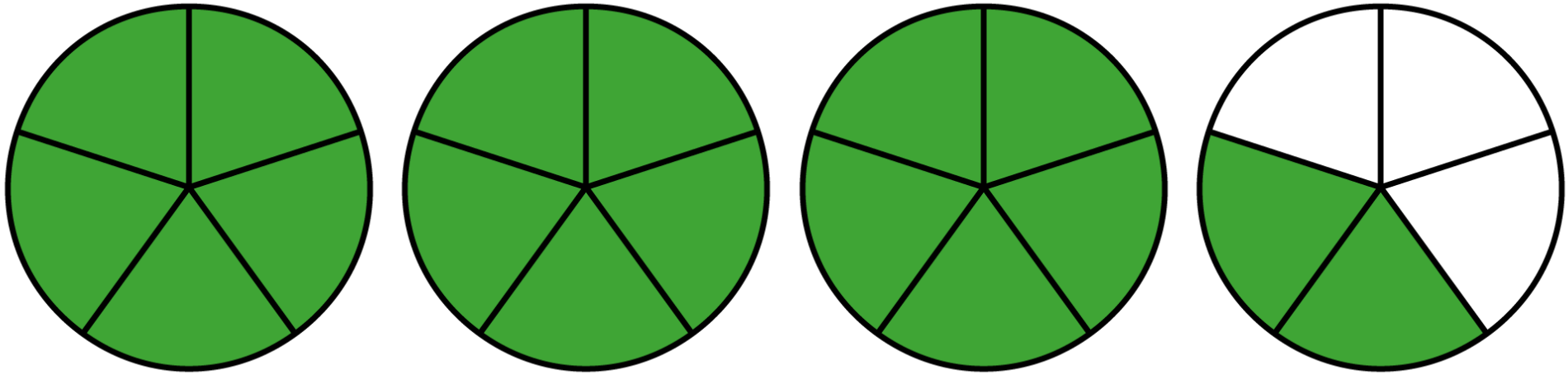
FK: Calculating with Fractions

6÷a

Grouping Model - Dividing by a Fraction

$$3\frac{2}{5} \div \frac{1}{5} = 17$$

"How many fifths can I fit into a 3 and 2 fifths? Answer: 17."



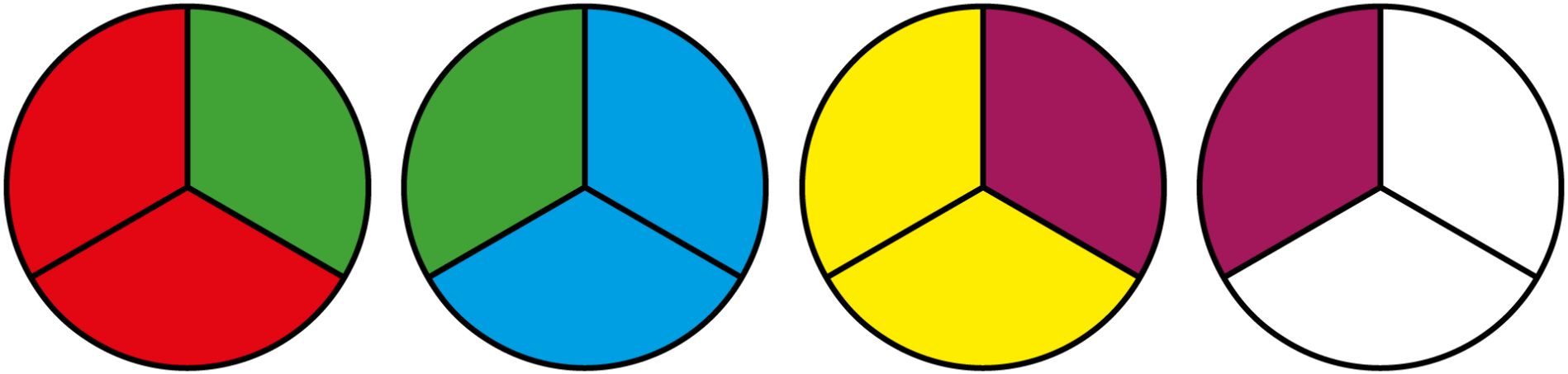
FK: Calculating with Fractions

6÷b

Grouping Model - Dividing by a Fraction

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

"How many two-thirds can I fit into a 3 and a third? Answer: 5."



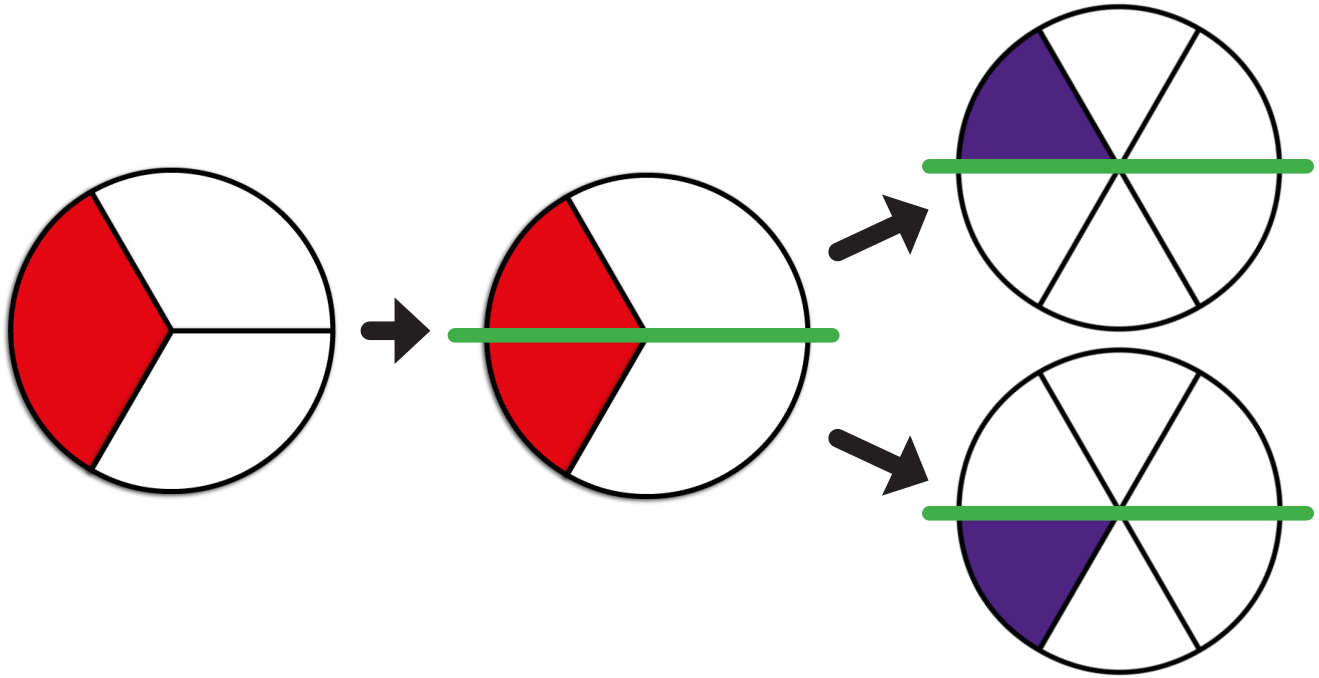
FK: Calculating with Fractions

6÷c

Sharing Model - Dividing a fraction by a whole number

$$\frac{1}{3} \div 2 = \frac{1}{6}$$

"If I share a third into 2 equal amounts, how much in each group?" Answer: A sixth



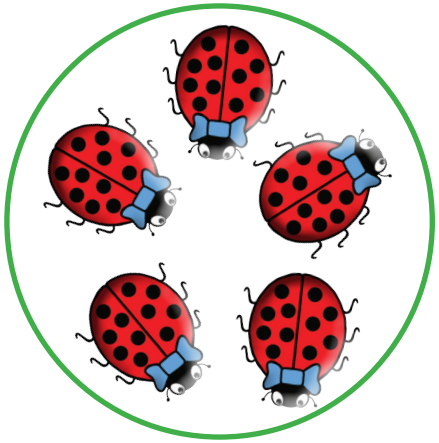
FL: Division as a Fraction

3

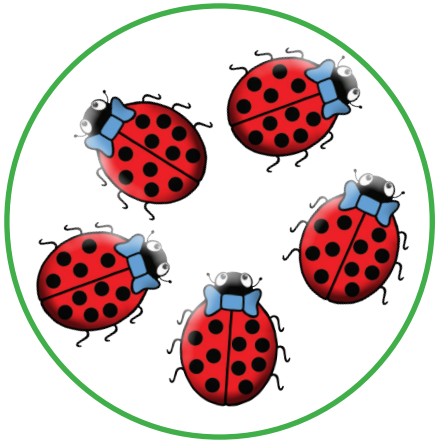
Sharing Model

$\frac{1}{4}$ of 20 = 20 ÷ 4 = 5

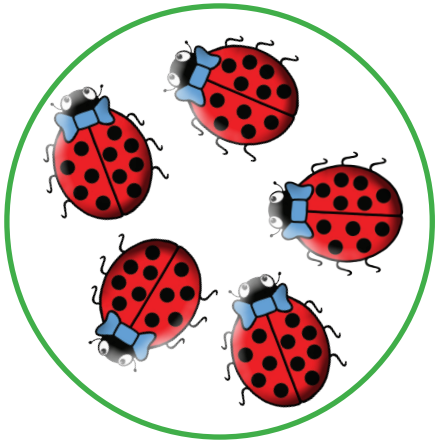
$\frac{1}{4}$



$\frac{1}{4}$



$\frac{1}{4}$



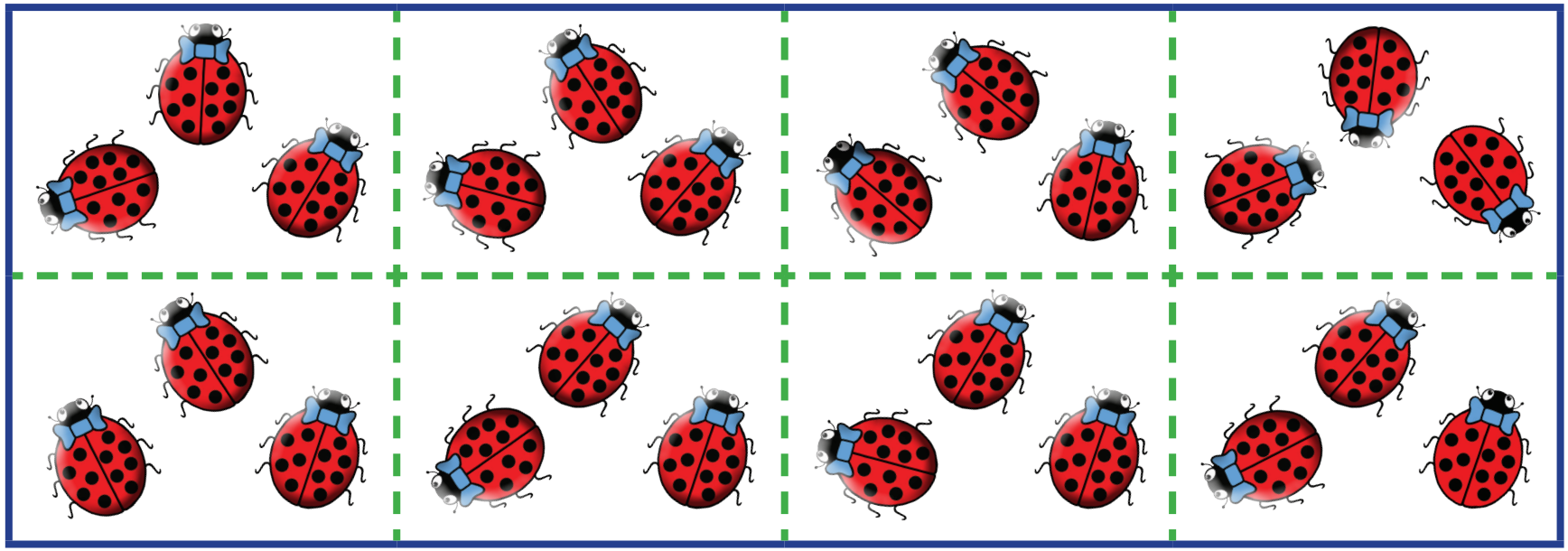
$\frac{1}{4}$

FL: Division as a Fraction

4a

Sharing Model

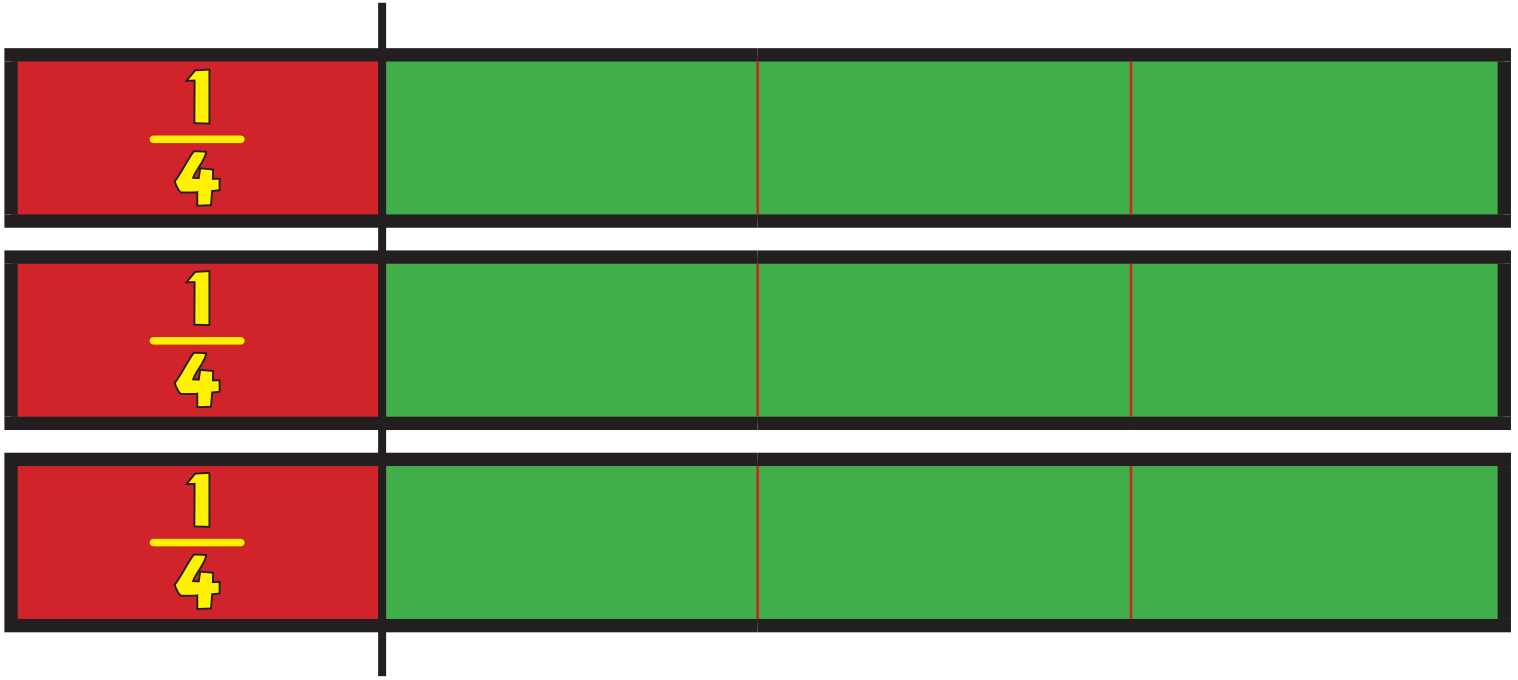
$\frac{1}{8}$ of 24 = 24 ÷ 8 = 3



FL: Division as a Fraction

4b

$$\frac{1}{4} \text{ of } 3 = 3 \div 4 = \frac{3}{4}$$

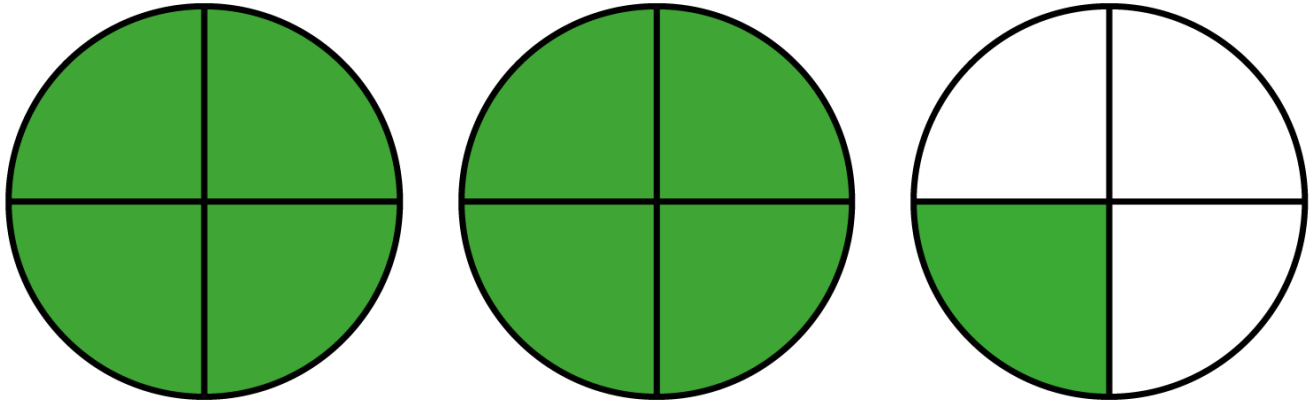


FL: Division as a Fraction

5a

Mixed Number Model

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



(9 quarters = 2 and a quarter)

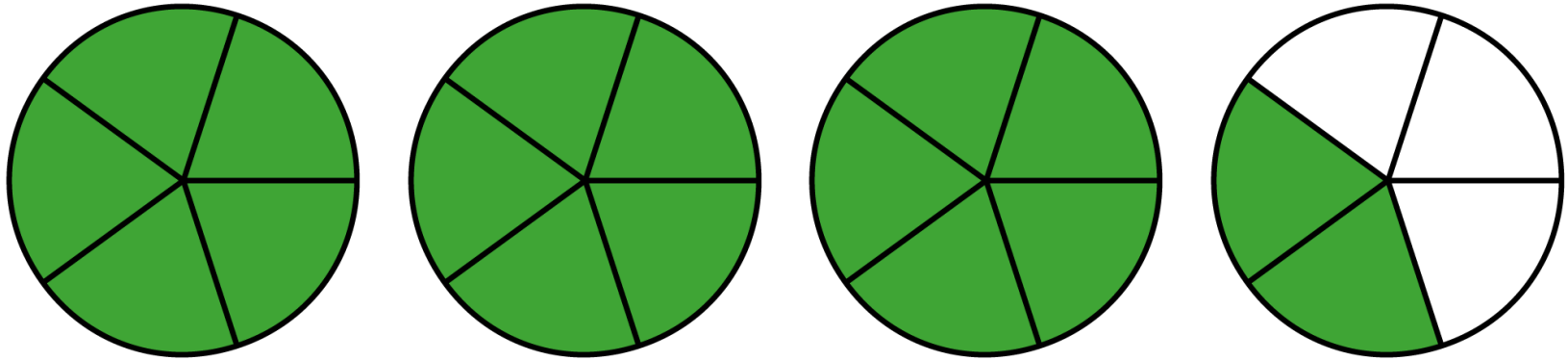
FL: Division as a Fraction

5b

Mixed Number Model

$\frac{1}{5}$ of 17 = 17 ÷ 5 = $\frac{17}{5}$ = $3\frac{2}{5}$

(3.4)



(17 fifths = 3 and 2 wholes)

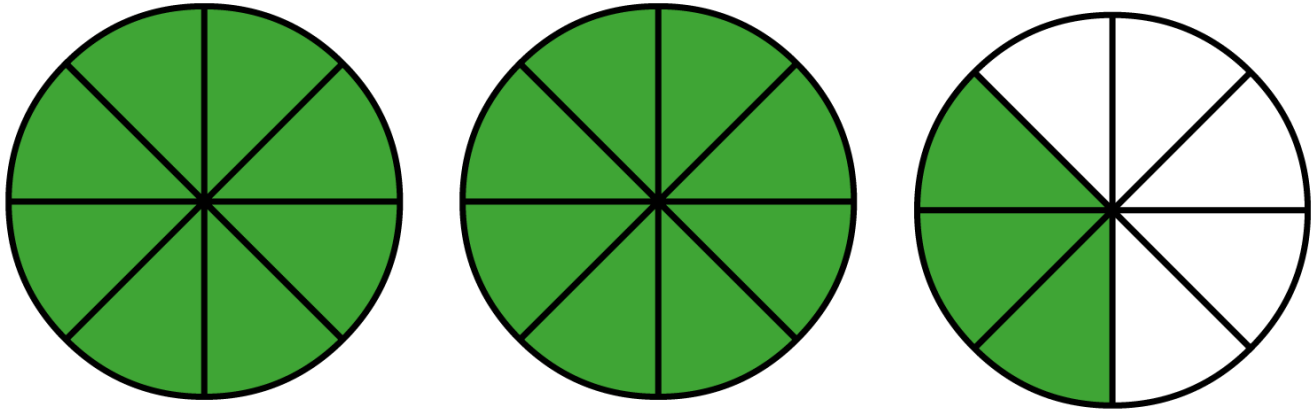
FL: Division as a Fraction

6a

Mixed Number Model

$$\frac{1}{8} \text{ of } 19 = 19 \div 8 = \frac{19}{8} = 2\frac{3}{8}$$

(2.375)



(19 eighths = 2 and 3 eighths)

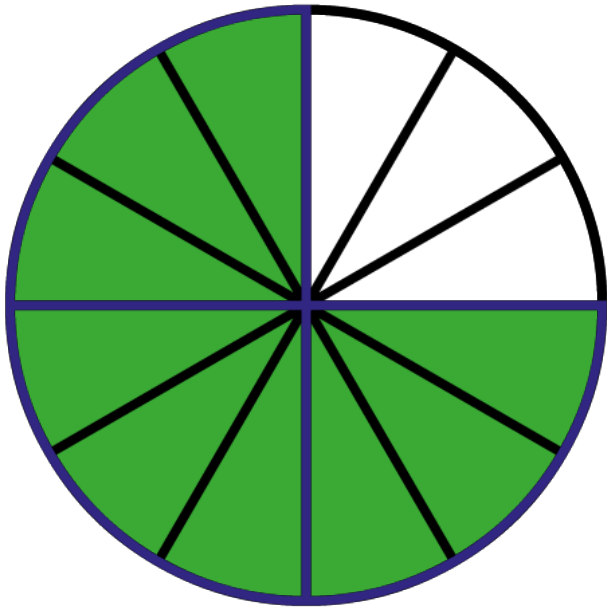
FL: Division as a Fraction

6b

Mixed Number Model

$$\frac{1}{12} \text{ of } 9 = 9 \div 12 = \frac{9}{12} = \frac{3}{4}$$

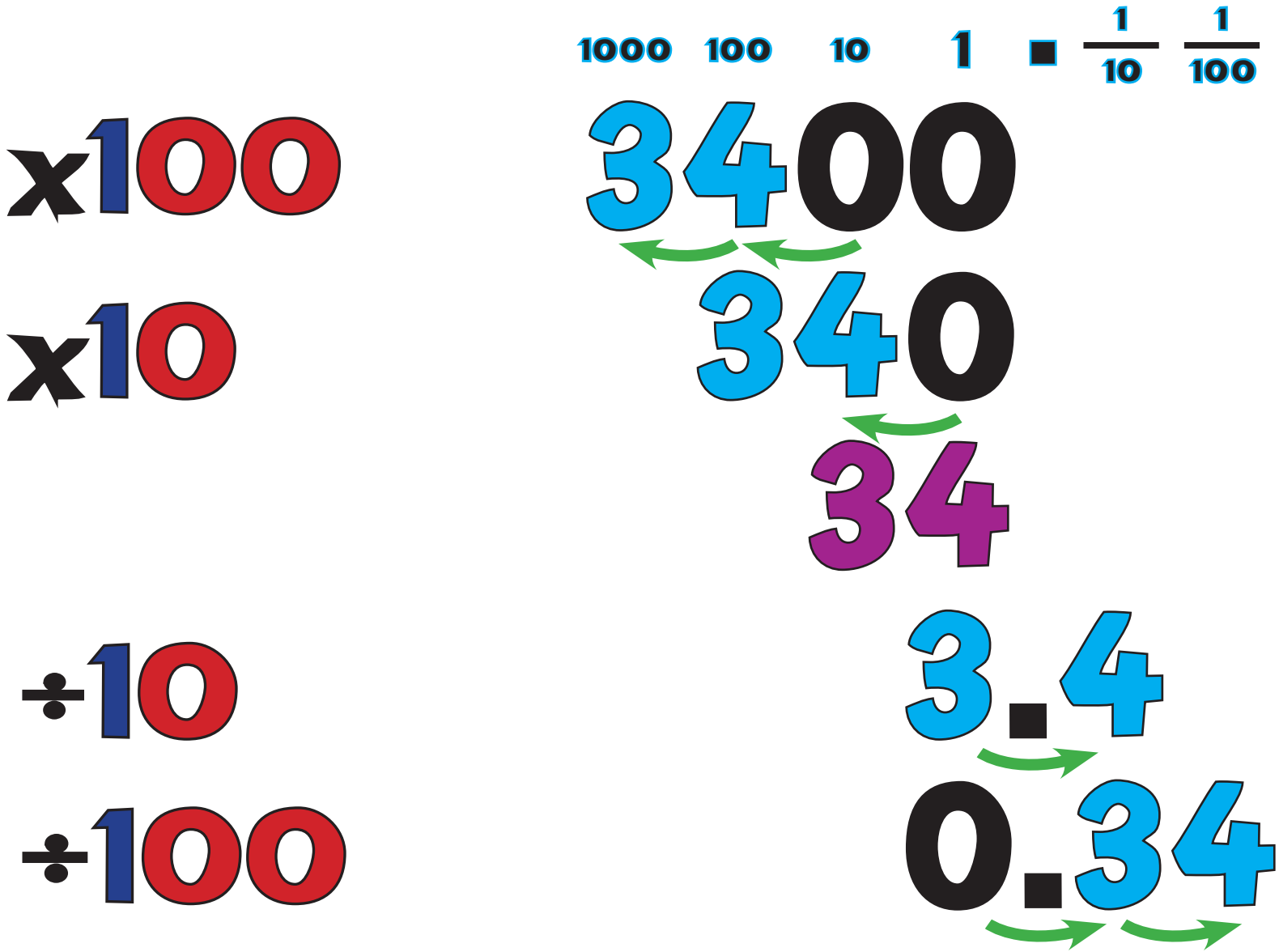
(0.75)



(9 twelfths = 3 quarters)

FM: Jump!

5



FM: Remainders = 5r2!

6

$22 \div 4 = 5\frac{1}{2}$ = 5r2 = 5.5

$47 \div 9 = 5\frac{2}{9}$ = 5r2 = $5.\dot{2}$

$42 \div 8 = 5\frac{2}{8}$ = 5r2 = 5.25

$27 \div 5 = 5\frac{2}{5}$ = 5r2 = 5.4

$52 \div 10 = 5\frac{1}{5}$ = 5r2 = 5.2

$17 \div 3 = 5\frac{2}{3}$ = 5r2 = $5.\dot{6}$

$32 \div 6 = 5\frac{2}{6} = 5\frac{1}{3}$ = 5r2 = $5.3\dot{}$

$37 \div 7 = 5\frac{2}{7}$ = 5r2 = $5.\overline{285714}$