

22.11.21

L.O. To find fractions of different quantities and apply knowledge to solve problems.

Do now!

Can I work out fractions of numbers and quantities?

	$\frac{1}{2}$	$\frac{1}{4}$	$\frac{1}{5}$	$\frac{1}{10}$	$\frac{3}{4}$	$\frac{4}{5}$
£80						
60kg						
160						
1km						
1 metre						

Can I work out fractions of numbers and quantities?

	$\frac{1}{2}$	$\frac{1}{4}$	$\frac{1}{5}$	$\frac{1}{10}$	$\frac{3}{4}$	$\frac{4}{5}$
£80						
60kg						
160						
1km						
1 metre						

Can I work out fractions of numbers and quantities?

	$\frac{1}{2}$	$\frac{1}{4}$	$\frac{1}{5}$	$\frac{1}{10}$	$\frac{3}{4}$	$\frac{4}{5}$
£80						
60kg						
160						
1km						
1 metre						

Can I work out fractions of numbers and quantities?

	$\frac{1}{2}$	$\frac{1}{4}$	$\frac{1}{5}$	$\frac{1}{10}$	$\frac{3}{4}$	$\frac{4}{5}$
£80						
60kg						
160						
1km						
1 metre						

Can I work out fractions of numbers and quantities?

	$\frac{1}{2}$	$\frac{1}{4}$	$\frac{1}{5}$	$\frac{1}{10}$	$\frac{3}{4}$	$\frac{4}{5}$
£80						
60kg						
160						
1km						
1 metre						

Can I work out fractions of numbers and quantities?

	$\frac{1}{2}$	$\frac{1}{4}$	$\frac{1}{5}$	$\frac{1}{10}$
£80				
60kg				
160				

Can I work out fractions of numbers and quantities?

	$\frac{1}{2}$	$\frac{1}{4}$	$\frac{1}{5}$	$\frac{1}{10}$
£80				
60kg				
160				

Can I work out fractions of numbers and quantities?

	$\frac{1}{2}$	$\frac{1}{4}$	$\frac{1}{5}$	$\frac{1}{10}$
£80				
60kg				
160				

Can I work out fractions of numbers and quantities?

	$\frac{1}{2}$	$\frac{1}{4}$	$\frac{1}{5}$	$\frac{1}{10}$
£80				
60kg				
160				

Can I work out fractions of numbers and quantities?

	$\frac{1}{2}$	$\frac{1}{4}$	$\frac{1}{5}$	$\frac{1}{10}$
£80				
60kg				
160				

Can I work out fractions of numbers and quantities?

	$\frac{1}{2}$	$\frac{1}{4}$	$\frac{1}{5}$	$\frac{1}{10}$
£80				
60kg				
160				

160	60kg	£80	
			$\frac{1}{2}$
			$\frac{1}{4}$
			$\frac{1}{5}$
			$\frac{1}{10}$

Can I work out fractions of numbers and quantities?

Crucial Vocabulary:

fraction

amount

numerator

denominator

equivalent

simplifying

36

--	--	--	--

85

--	--	--	--	--

63

--	--	--	--	--	--	--

100

--	--	--	--	--

150

--	--	--	--	--

--	--	--	--	--

120

--	--	--	--	--

--	--	--	--	--

--	--	--	--	--

55

--	--	--	--	--

--	--	--	--	--

--	--	--	--	--

70

--	--	--	--	--

70

--	--	--	--	--

70

--	--	--	--	--

70

--	--	--	--	--

70

--	--	--	--	--

70

--	--	--	--	--

70

--	--	--	--	--

70

--	--	--	--	--

70

--	--	--	--	--

48

--	--	--	--

48

--	--	--	--

48

--	--	--	--

48

--	--	--	--

Mon- Triangles: Mrs Cooper

36

--	--	--

14

--	--	--	--	--	--	--

60

--	--	--	--	--

50

--	--	--	--	--

32

--	--	--	--	--	--	--	--

21

--	--	--

Triangle questions

$$\frac{2}{3} \text{ of } 36 =$$

$$\frac{4}{7} \text{ of } 14 =$$

$$\frac{4}{5} \text{ of } 60 =$$

$$\frac{1}{5} \text{ of } 50 =$$

$$\frac{2}{8} \text{ of } 32 =$$

$$\frac{2}{3} \text{ of } 21 =$$

Squares: Mrs Lund

$$1) \quad 1/5 \text{ of } 70 =$$

$$3/5 \text{ of } 70 =$$

$$2) \quad 1/4 \text{ of } 48 =$$

$$3/4 \text{ of } 48 =$$

$$3) \quad 1/7 \text{ of } 56 =$$

$$4/7 \text{ of } 56 =$$

$$4) \quad 1/5 \text{ of } 35 =$$

$$4/5 \text{ of } 35 =$$

$$5) \quad 1/4 \text{ of } 16 =$$

$$3/4 \text{ of } 16 =$$

$$6) \quad 1/7 \text{ of } 84 =$$

$$5/7 \text{ of } 84 =$$

$$7) \quad 1/9 \text{ of } 45 =$$

$$4/9 \text{ of } 45 =$$

$$8) \quad 1/8 \text{ of } 72 =$$

$$7/8 \text{ of } 72 =$$

$$9) \quad 1/8 \text{ of } 720 =$$

$$7/8 \text{ of } 720 =$$

Squares:
Mon
Mrs Lund

$$1) \quad 1/5 \text{ of } 70 =$$

$$3/5 \text{ of } 70 =$$

$$2) \quad 1/4 \text{ of } 48 =$$

$$3/4 \text{ of } 48 =$$

$$3) \quad 1/7 \text{ of } 56 =$$

$$4/7 \text{ of } 56 =$$

$$4) \quad 1/5 \text{ of } 35 =$$

$$4/5 \text{ of } 35 =$$

$$5) \quad 1/4 \text{ of } 16 =$$

$$3/4 \text{ of } 16 =$$

$$6) \quad 1/7 \text{ of } 84 =$$

$$5/7 \text{ of } 84 =$$

$$7) \quad 1/9 \text{ of } 45 =$$

$$4/9 \text{ of } 45 =$$

$$8) \quad 1/8 \text{ of } 72 =$$

$$7/8 \text{ of } 72 =$$

$$9) \quad 1/8 \text{ of } 720 =$$

$$7/8 \text{ of } 720 =$$

Hexagons

Mon:

1) $\frac{1}{5}$ of 170 =	$\frac{3}{5}$ of 170 =
2) $\frac{1}{4}$ of 448 =	$\frac{3}{4}$ of 448 =
3) $\frac{3}{7}$ of 560 =	$\frac{4}{7}$ of 560 =
4) $\frac{1}{5}$ of 335 =	$\frac{4}{5}$ of 335 =
5) $\frac{4}{9}$ of 450 =	$\frac{7}{9}$ of 450 =
6) $\frac{1}{8}$ of 120 =	$\frac{7}{8}$ of 120 =

Hexagons:

1) $\frac{1}{5}$ of 170 =	$\frac{3}{5}$ of 170 =
2) $\frac{1}{4}$ of 448 =	$\frac{3}{4}$ of 448 =
3) $\frac{3}{7}$ of 560 =	$\frac{4}{7}$ of 560 =
4) $\frac{1}{5}$ of 335 =	$\frac{4}{5}$ of 335 =
5) $\frac{4}{9}$ of 450 =	$\frac{7}{9}$ of 450 =
6) $\frac{1}{8}$ of 120 =	$\frac{7}{8}$ of 120 =

1) $1/5$ of 765	1) $1/5$ of 765	1) $1/5$ of 765	1) $1/5$ of 765	1) $1/5$ of 765	1) $1/5$ of 765	1) $1/5$ of 765
2) $3/5$ of 765	2) $3/5$ of 765	2) $3/5$ of 765	2) $3/5$ of 765	2) $3/5$ of 765	2) $3/5$ of 765	2) $3/5$ of 765
3) $1/7$ of 812	3) $1/7$ of 812	3) $1/7$ of 812	3) $1/7$ of 812	3) $1/7$ of 812	3) $1/7$ of 812	3) $1/7$ of 812
4) $5/7$ of 812	4) $5/7$ of 812	4) $5/7$ of 812	4) $5/7$ of 812	4) $5/7$ of 812	4) $5/7$ of 812	4) $5/7$ of 812
5) $1/4$ of 824	5) $1/4$ of 824	5) $1/4$ of 824	5) $1/4$ of 824	5) $1/4$ of 824	5) $1/4$ of 824	5) $1/4$ of 824
6) $3/4$ of 824	6) $3/4$ of 824	6) $3/4$ of 824	6) $3/4$ of 824	6) $3/4$ of 824	6) $3/4$ of 824	6) $3/4$ of 824
7) $1/3$ of 666	7) $1/3$ of 666	7) $1/3$ of 666	7) $1/3$ of 666	7) $1/3$ of 666	7) $1/3$ of 666	7) $1/3$ of 666
8) $2/3$ of 666	8) $2/3$ of 666	8) $2/3$ of 666	8) $2/3$ of 666	8) $2/3$ of 666	8) $2/3$ of 666	8) $2/3$ of 666
9) $1/5$ of 870	9) $1/5$ of 870	9) $1/5$ of 870	9) $1/5$ of 870	9) $1/5$ of 870	9) $1/5$ of 870	9) $1/5$ of 870
10) $4/5$ of 870	10) $4/5$ of 870	10) $4/5$ of 870	10) $4/5$ of 870	10) $4/5$ of 870	10) $4/5$ of 870	10) $4/5$ of 870
11) $5/6$ of 360	11) $5/6$ of 360	11) $5/6$ of 360	11) $5/6$ of 360	11) $5/6$ of 360	11) $5/6$ of 360	11) $5/6$ of 360
12) $3/4$ of 1824	12) $3/4$ of 1824	12) $3/4$ of 1824	12) $3/4$ of 1824	12) $3/4$ of 1824	12) $3/4$ of 1824	12) $3/4$ of 1824
13) $2/7$ of 3598	13) $2/7$ of 3598	13) $2/7$ of 3598	13) $2/7$ of 3598	13) $2/7$ of 3598	13) $2/7$ of 3598	13) $2/7$ of 3598
14) $4/5$ of 455	14) $4/5$ of 455	14) $4/5$ of 455	14) $4/5$ of 455	14) $4/5$ of 455	14) $4/5$ of 455	14) $4/5$ of 455

Challenge:

Dave says that it is possible to find $\frac{3}{5}$ of 423.

Is he right?

Explain why/ why not.

Maths meeting Mon- Key skills

Maths meeting

Tues 23.12.21

Place Value

Put these numbers in order from smallest to greatest:

787 877, 788 787, 787 787, 788 778

Reveal answer

+ and -

Solve this column addition:

$$\begin{array}{r} 7 \ 4 \ 5 \ 4 \ 3 \\ + \quad 4 \ 4 \ 4 \ 7 \\ \hline \\ \hline \end{array}$$

Reveal answer

× and ÷

Solve this written method of multiplication:

$$\begin{array}{r} 7 \ 5 \ 5 \ 9 \\ \times \quad \quad \quad 8 \\ \hline \\ \hline \end{array}$$

Reveal answer

Fractions

Add together these fractions:

$$\frac{5}{12} + \frac{1}{12}$$

Reveal answer

Problem Solving

What is this afternoon time on a 24-hour digital clock?



Reveal answer

Reasoning

$\frac{3}{8}$ is equivalent to $\frac{6}{16}$.

Is Henry correct?
Explain your reasoning.



Place Value

Put these numbers in order from smallest to greatest:

787 877, 788 787, 787 787, 788 778

787 787, 787 877, 788 778, 788 787

+ and -

Solve this column addition:

$$\begin{array}{r} 74543 \\ + 4447 \\ \hline 78990 \\ \hline 1 \end{array}$$

× and ÷

Solve this written method of multiplication:

$$\begin{array}{r} 7559 \\ \times 8 \\ \hline 60472 \\ \hline 447 \end{array}$$

Fractions

Add together these fractions:

$$\frac{5}{12} + \frac{1}{12} = \frac{6}{12} \text{ or } \frac{1}{2}$$

Problem Solving

What is this afternoon time on a 24-hour digital clock? **18:10**



Reasoning

$\frac{3}{8}$ is equivalent to $\frac{6}{16}$.

Is Henry correct?
Explain your reasoning.



23.11.21

L.O. to find fractions of different quantities and apply knowledge to solve problems.

$$\frac{1}{5} \text{ of } 20 =$$

$$\frac{7}{9} \text{ of } 45 =$$

1 mark

Challenge 2:

True or false?

To find $\frac{3}{8}$ of a number, you need to divide by 3 and then multiply by 8.

Convince me

Do in your
book

$$\frac{1}{5} \text{ of } 20 =$$

1 mark

$$\frac{7}{9} \text{ of } 45 =$$

1 mark

Challenge 2:

True or false?

To find $\frac{3}{8}$ of a number, you need to divide by 3 and then multiply by 8.

Convince me

Challenge 2:

True or false?

To find $\frac{3}{8}$ of a number, you need to divide by 3 and then multiply by 8.

Convince me

Challenge 2:

True or false?

To find $\frac{3}{8}$ of a number, you need to divide by 3 and then multiply by 8.

Convince me

Challenge 2:

True or false?

To find $\frac{3}{8}$ of a number, you need to divide by 3 and then multiply by 8.

Convince me

Challenge 2:

True or false?

To find $\frac{3}{8}$ of a number, you need to divide by 3 and then multiply by 8.

Convince me

Challenge 2:

True or false?

To find $\frac{3}{8}$ of a number, you need to divide by 3 and then multiply by 8.

Convince me

Challenge 2:

True or false?

To find $\frac{3}{8}$ of a number, you need to divide by 3 and then multiply by 8.

Convince me

Tues

Crucial Vocabulary:

fraction

amount

numerator

denominator

equivalent

simplifying

Calculate $\frac{7}{16}$ of **288**

1 mark

Calculate of $\frac{5}{12}$ of **378**

1 mark

Talk about it!

In a class, 18 of the children are girls.

A quarter of the children in the class are boys.

Altogether, how many children are there in the class?

Show
your
method

2 marks

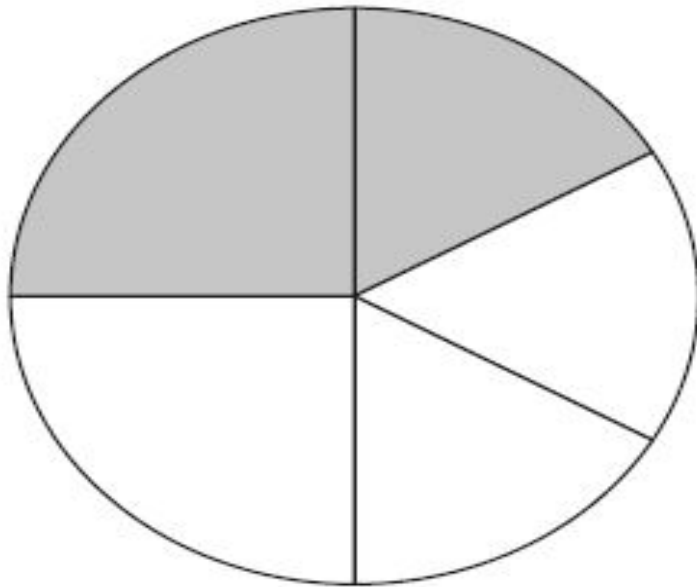
How much money did Lara have to **start with**?

Show
your
method

£

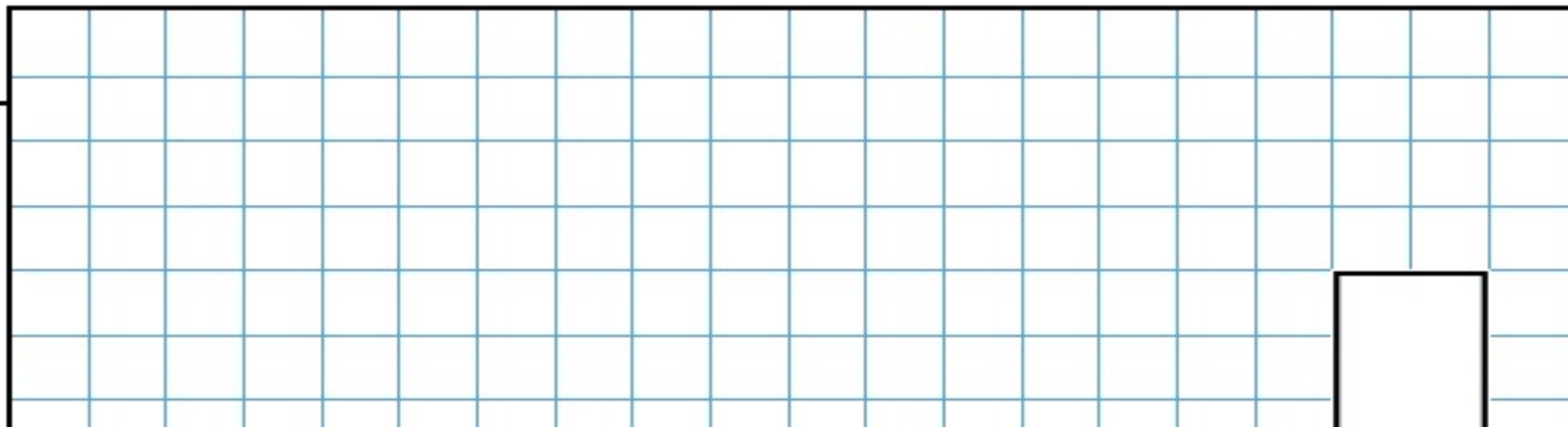
The diagram shows a large rhombus oriented with its vertices at the top, bottom, left, and right. It is divided into four smaller rhombi by its two diagonals. The rhombus in the center, formed by the intersection of the diagonals, is shaded gray. The other three rhombi (top, bottom, and left) are white.

In this circle, $\frac{1}{4}$ and $\frac{1}{6}$ are shaded.



What fraction of the whole circle is **not** shaded?

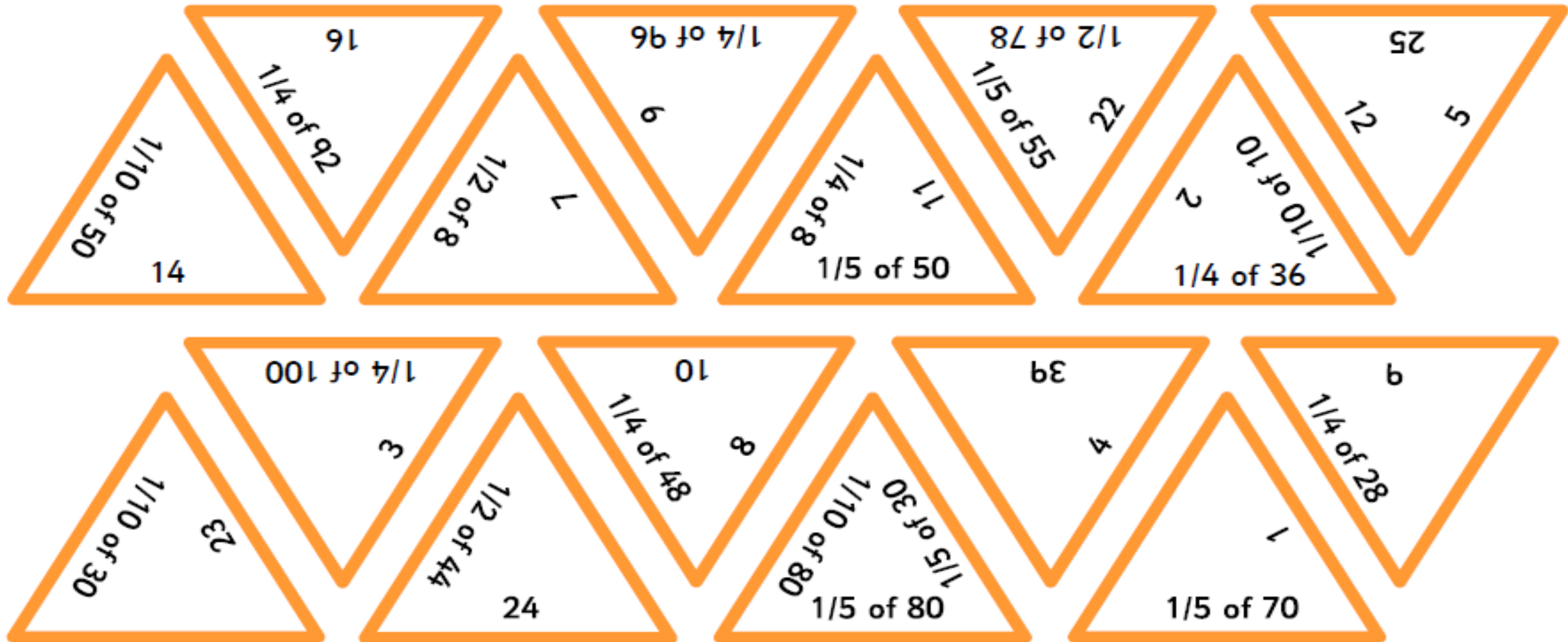
Show
your
method



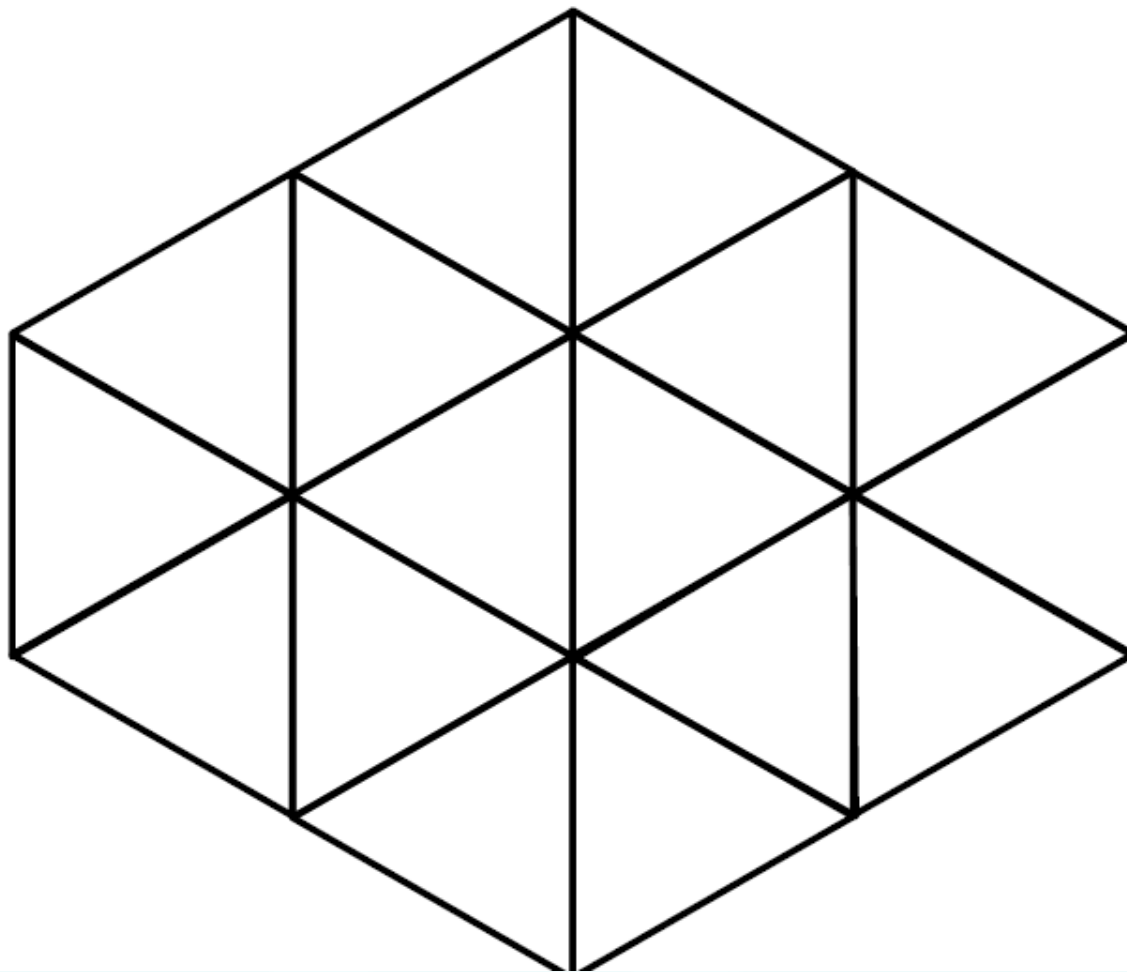
Tues-Triangles ...group

Fractions of Amounts Tri-Jigsaw

Cut out the triangles and place them edge to edge on the grid with matching questions and answers touching each other.

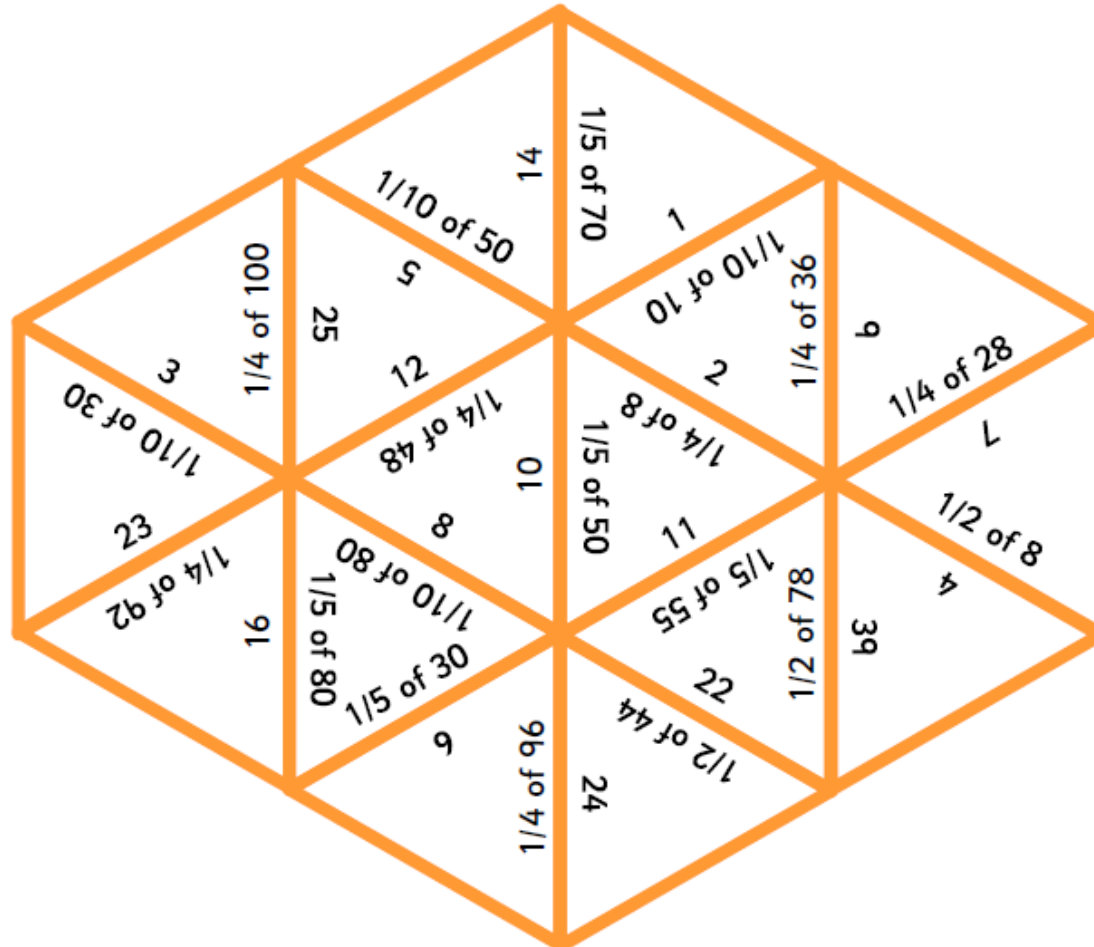


Fractions of Amounts Tri-Jigsaw



Triangles answers...

Fractions of Amounts Tri-Jigsaw



Can I use my understanding of fractions to solve these problems?

$$30 \rightarrow \frac{1}{6} \rightarrow \bigcirc \quad 20 \rightarrow \bigcirc \rightarrow 6$$

$$40 \rightarrow \frac{1}{8} \rightarrow \bigcirc \quad 120 \rightarrow \frac{3}{8} \rightarrow \bigcirc$$

$$36 \rightarrow \frac{2}{3} \rightarrow \bigcirc \quad 60 \rightarrow \frac{2}{3} \rightarrow \bigcirc$$

$$50 \rightarrow \frac{3}{10} \rightarrow \bigcirc \quad \bigcirc \rightarrow \frac{3}{8} \rightarrow 24$$

$$6 \rightarrow \bigcirc \rightarrow 3 \quad 90 \rightarrow \bigcirc \rightarrow 60$$

$$\bigcirc \rightarrow \frac{1}{5} \rightarrow 6 \quad 60 \rightarrow 1\frac{2}{3} \rightarrow \bigcirc$$

$$\bigcirc \rightarrow \frac{1}{8} \rightarrow 10 \quad 40 \rightarrow 1\frac{4}{5} \rightarrow \bigcirc$$

$$96 \rightarrow \bigcirc \rightarrow 48 \quad 70 \rightarrow \bigcirc \rightarrow 77$$

$$150 \rightarrow \bigcirc \rightarrow 50 \quad 90 \rightarrow \bigcirc \rightarrow 18$$

$$30 \rightarrow \frac{9}{10} \rightarrow \bigcirc \quad \bigcirc \rightarrow \frac{2}{3} \rightarrow 30$$

Can I use my understanding of fractions to solve these problems?

$$30 \rightarrow \frac{1}{6} \rightarrow \bigcirc \quad 20 \rightarrow \bigcirc \rightarrow 6$$

$$40 \rightarrow \frac{1}{8} \rightarrow \bigcirc \quad 120 \rightarrow \frac{3}{8} \rightarrow \bigcirc$$

$$36 \rightarrow \frac{2}{3} \rightarrow \bigcirc \quad 60 \rightarrow \frac{2}{3} \rightarrow \bigcirc$$

$$50 \rightarrow \frac{3}{10} \rightarrow \bigcirc \quad \bigcirc \rightarrow \frac{3}{8} \rightarrow 24$$

$$6 \rightarrow \bigcirc \rightarrow 3 \quad 90 \rightarrow \bigcirc \rightarrow 60$$

$$\bigcirc \rightarrow \frac{1}{5} \rightarrow 6 \quad 60 \rightarrow 1\frac{2}{3} \rightarrow \bigcirc$$

$$\bigcirc \rightarrow \frac{1}{8} \rightarrow 10 \quad 40 \rightarrow 1\frac{4}{5} \rightarrow \bigcirc$$

$$96 \rightarrow \bigcirc \rightarrow 48 \quad 70 \rightarrow \bigcirc \rightarrow 77$$

$$150 \rightarrow \bigcirc \rightarrow 50 \quad 90 \rightarrow \bigcirc \rightarrow 18$$

$$30 \rightarrow \frac{9}{10} \rightarrow \bigcirc \quad \bigcirc \rightarrow \frac{2}{3} \rightarrow 30$$

Squares
...Mrs Lund
Tues

Fraction Chains



Can I use my understanding of fractions to solve these problems?

42	$\frac{5}{6}$	○	200		140
48	$\frac{7}{8}$	○	150		250
24	$\frac{5}{3}$	○	○	$\frac{5}{8}$	30
40	$1\frac{7}{10}$	○	○	$\frac{8}{5}$	24
○	$\frac{2}{5}$	4	60	$1\frac{2}{5}$	○
○	$\frac{3}{8}$	6	18		48
○		30	80		112
28	$2\frac{1}{2}$	○	96	$\frac{19}{12}$	○
30		51	○	$\frac{5}{12}$	40
30	$\frac{7}{5}$	○	30		84

Fraction Chains



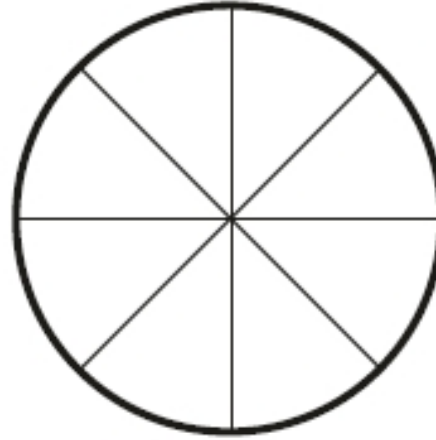
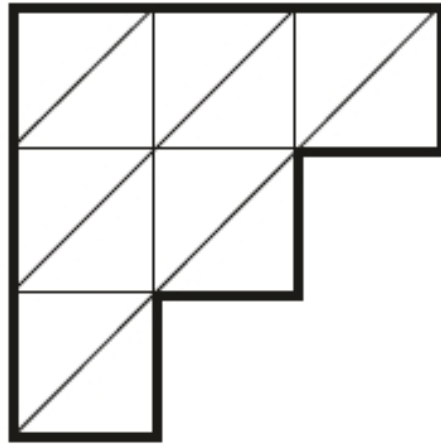
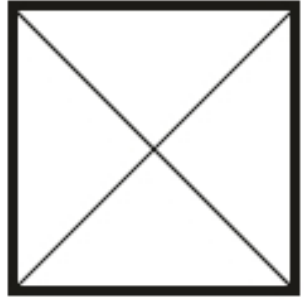
Can I use my understanding of fractions to solve these problems?

42	$\frac{5}{6}$	○	200		140
48	$\frac{7}{8}$	○	150		250
24	$\frac{5}{3}$	○	○	$\frac{5}{8}$	30
40	$1\frac{7}{10}$	○	○	$\frac{8}{5}$	24
○	$\frac{2}{5}$	4	60	$1\frac{2}{5}$	○
○	$\frac{3}{8}$	6	18		48
○		30	80		112
28	$2\frac{1}{2}$	○	96	$\frac{19}{12}$	○
30		51	○	$\frac{5}{12}$	40
30	$\frac{7}{5}$	○	30		84

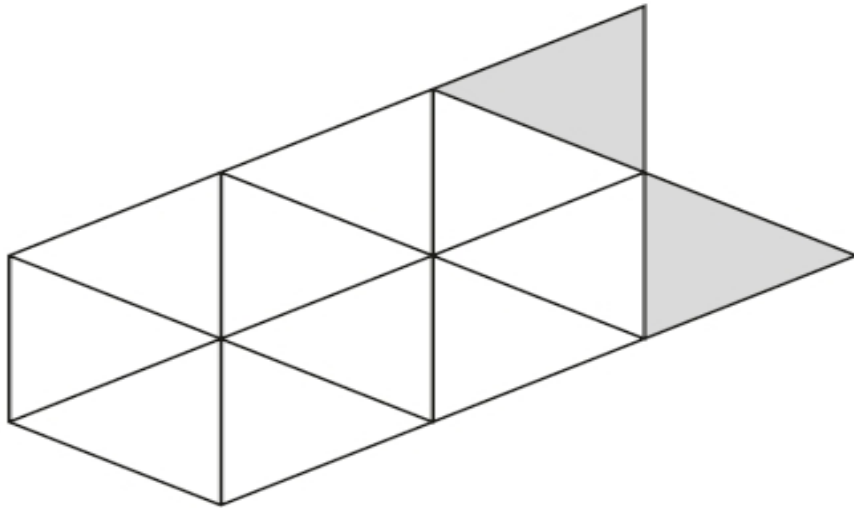
Oct/Hexa
gons-
class
Tues

Each diagram below is divided into equal sections.

Shade three-quarters of each diagram.



Shade **more** triangles on this shape so that is $\frac{1}{3}$ shaded



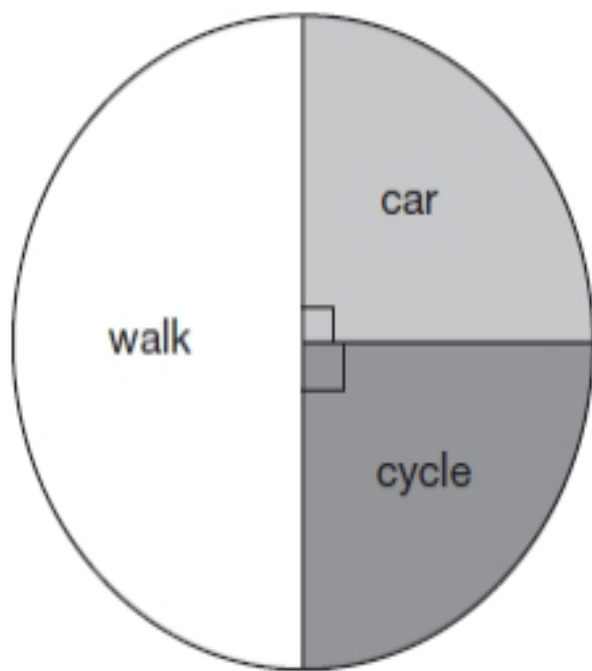
Extension

1 mark

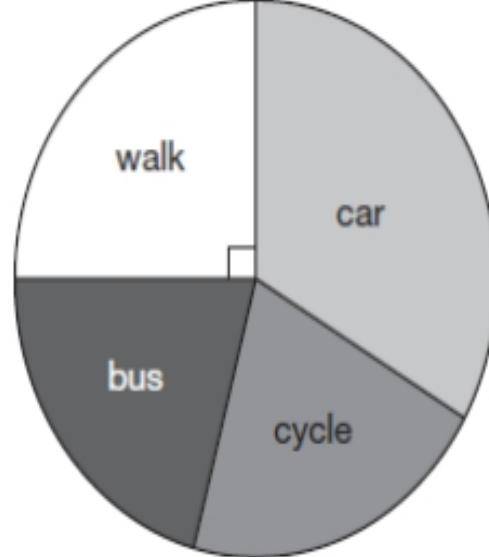
Megan asked children from two different schools,

'How do you travel to school?'

Here are her results.



Foxwood school
80 children



Midtown school
240 children

Megan says,

'The number of children walking to Foxwood school is more than the number walking to Midtown school.'

Is she correct?

Circle **Yes** or **No**.

Yes / No

Explain how you know.

Plenary

A teacher wants to share some pencils between 2 groups of children, offering one group $\frac{3}{4}$ and the other $\frac{2}{5}$ of the pencils.

Explain how you could add the fractions to show this is not possible.

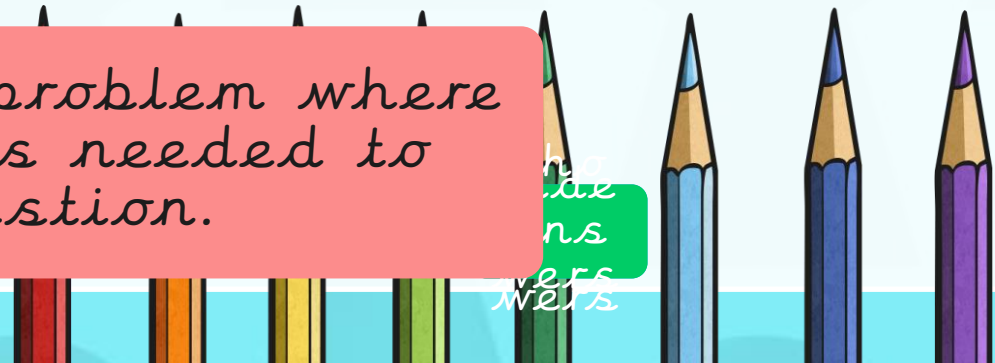
The fractions need to be expressed with the same denominator.

The lowest common multiple of 4 and 5 is 20, so express the fractions as 20th.

$$\frac{3}{4} + \frac{2}{5} = \frac{15}{20} + \frac{8}{20} = \frac{23}{20} = 1\frac{3}{20}$$

This is more than 1 whole, so the pencils cannot be shared with these fractions.

Write your own word problem where adding fractions is needed to solve the question.



24.11.21

**Stick in books
and do now!**



How many pages are there in Lara's book?

Show
your
method

On Saturday Lara read $\frac{2}{5}$ of her book.



On Sunday she read the **other** 90 pages to finish the book.

How many pages are there in Lara's book?

Show
your
method

On Saturday Lara read $\frac{2}{5}$ of her book.



On Sunday she read the **other** 90 pages to finish the book.

How many pages are there in Lara's book?

Show your method

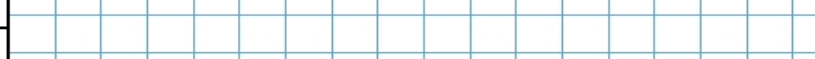
On Saturday Lara read $\frac{2}{5}$ of her book.



On Sunday she read the **other** 90 pages to finish the book.

How many pages are there in Lara's book?

Show your method



On Saturday Lara read $\frac{2}{5}$ of her book.



On Sunday she read the **other** 90 pages to finish the book.

How many pages are there in Lara's book?

Show your method

On Saturday Lara read $\frac{2}{5}$ of her book.



On Sunday she read the **other** 90 pages to finish the book.

How many pages are there in Lara's book?

Show your method

Weds

Crucial Vocabulary:

fraction

amount

numerator

denominator

equivalent

Simplifying

proper fraction

improper fraction

mixed number

Multiplying fractions

$$\frac{3}{7} \times \frac{9}{1} = \frac{27}{7} = 3\frac{6}{7}$$

1. Place 9 over 1
2. Multiply the numerators and the denominators
2. Change this into a mixed number
3. Check your answer. Is it an improper fraction?

Multiplying fractions

$$\frac{6}{8} \times \frac{10}{1} = \frac{60}{8} = 7\frac{4}{8}$$

- 1.
- 2.
- 3.
- 2.



Multiplying two fractions together

If you have two fractions to multiply together, you simply multiply the numerators and denominators together - and show the answer in its simplest form.

$$\frac{3}{5} \times \frac{2}{3} = \frac{6}{15} \times \frac{2}{5}$$

Multiplying two fractions together

If you have two fractions to multiply together, you simply multiply the numerators and denominators together - and show the answer in its simplest form.

$$\frac{5}{8} \times \frac{2}{4} = \frac{10}{32} \times \frac{5}{16}$$

Multiplying two fractions together

If you have two fractions to multiply together, you simply multiply the numerators and denominators together - and show the answer in its simplest form.

$$\frac{3}{7} \times \frac{2}{4} = \frac{6}{28} \frac{3}{14}$$

Talk Task:



If... then...

$$\frac{14}{50} \times \frac{15}{35}$$

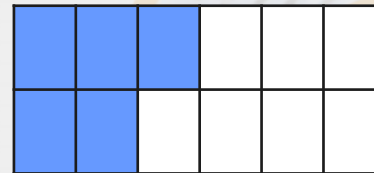
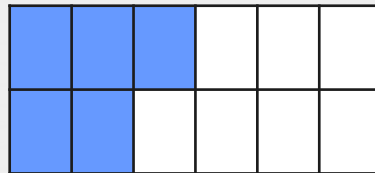
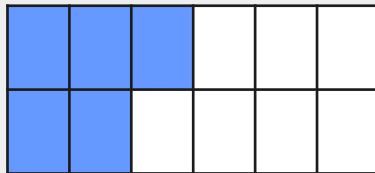
*In partners, explain how and why you
Would work this out.*

Varied Fluency 1

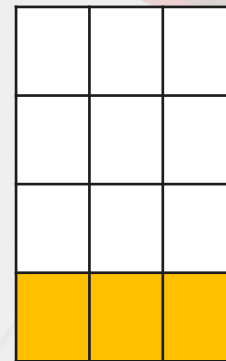
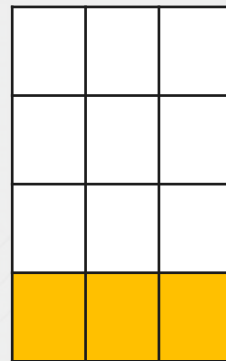
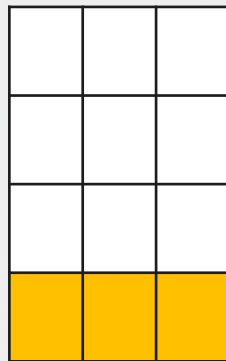
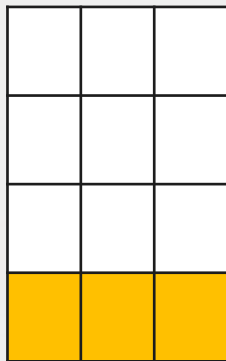
Which set of pictures shows the calculation below?

$$\frac{5}{12} \times 3$$

A



B

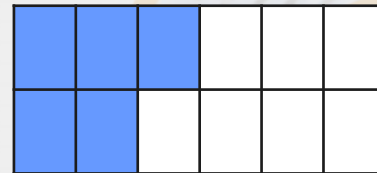
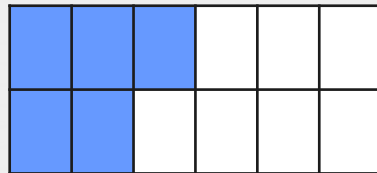
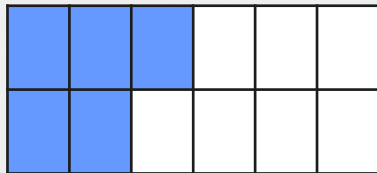


Varied Fluency 1

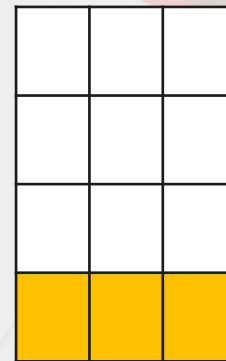
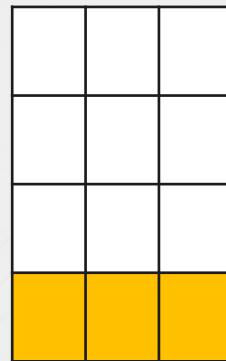
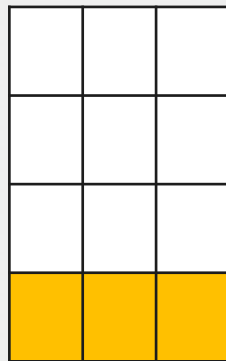
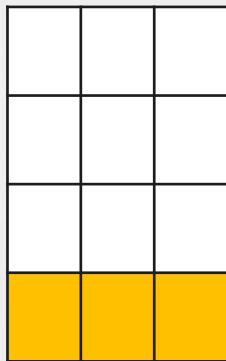
Which set of pictures shows the calculation below?

$$\frac{5}{12} \times 3$$

A

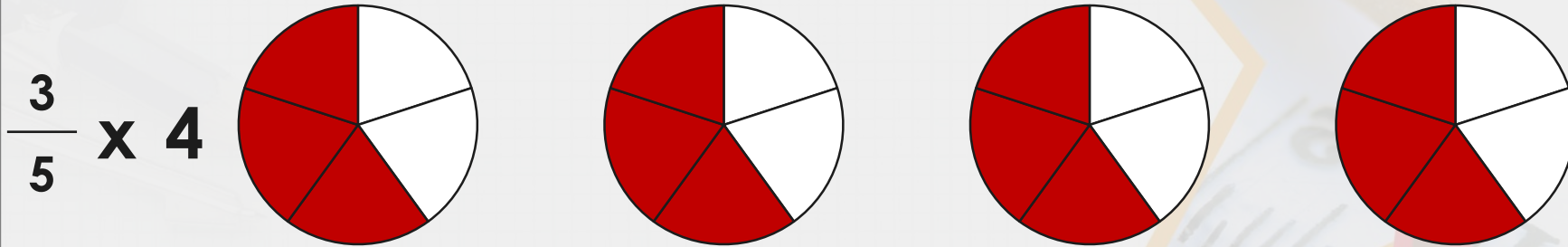


B



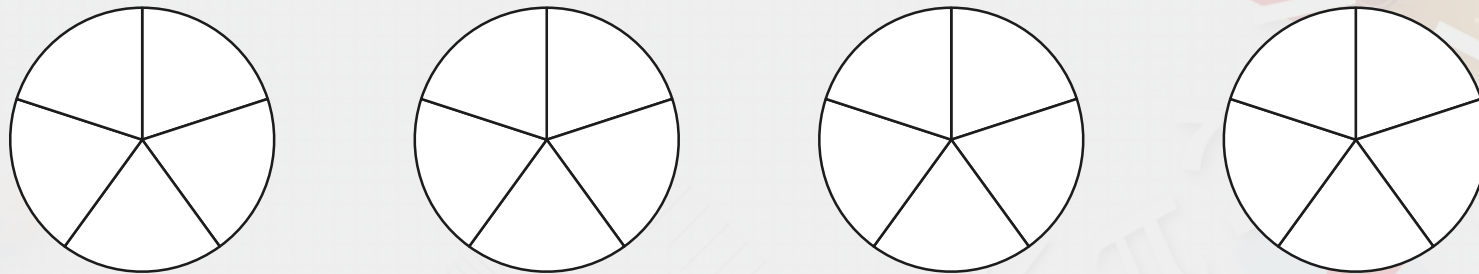
Varied Fluency 2

Here is a calculation shown as a picture:



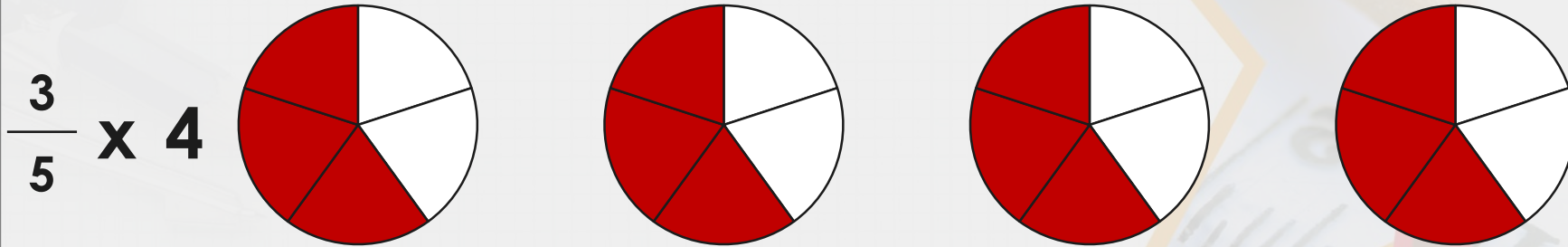
Fill in the picture below to show the answer as a mixed number.

What is the mixed number?



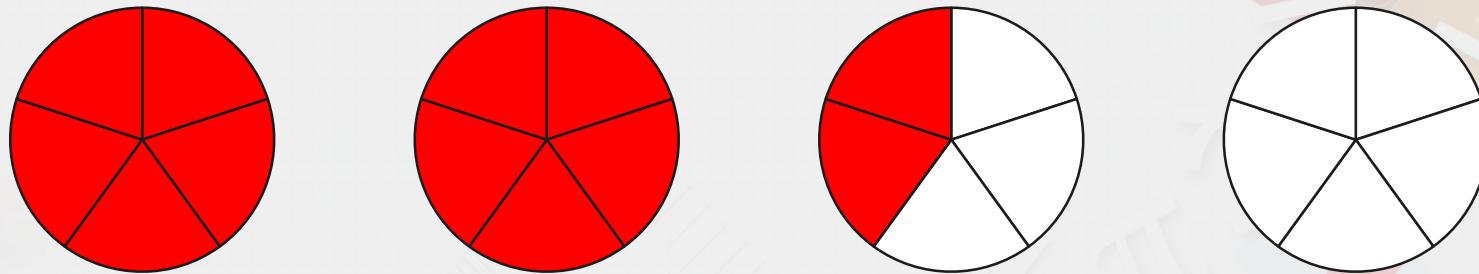
Varied Fluency 2

Here is a calculation shown as a picture:



Fill in the picture below to show the answer as a mixed number.

What is the mixed number? $2 \frac{2}{5}$



Varied Fluency 4

Put the correct < or > sign in the box between the calculations.

$$6 \times 2\frac{9}{10} \quad \square \quad 3\frac{2}{9} \times 7$$

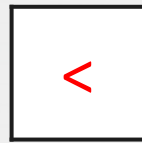
**Tip! Convert mixed no
to improper fraction
first!**

<https://www.mathsisfun.com/mixed-fractions-multiply.html>

Varied Fluency 4

Put the correct < or > sign in the box between the calculations.

$$6 \times 2\frac{9}{10}$$



$$3\frac{2}{9} \times 7$$

$$= 17\frac{4}{10}$$

$$= 22\frac{5}{9}$$

<https://www.mathsisfun.com/mixed-fractions-multiply.html>

The background of the slide is a solid light blue color, overlaid with a repeating pattern of stylized human figures. Each figure is composed of a light blue circle for the head and a light blue trapezoid for the body, creating a grid-like effect across the entire slide.

Over to you...

Weds

Triangles...

Mrs Lund

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

2. $\frac{1}{2} \times \frac{2}{3} =$

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

4. $\frac{7}{12} \times \frac{2}{3} =$

5. $\frac{4}{5} \times \frac{1}{6} =$

6. $\frac{1}{4} \times \frac{5}{7} =$

7. $\frac{3}{8} \times \frac{4}{5} =$

8. $\frac{4}{9} \times \frac{1}{4} =$

9. $\frac{5}{6} \times \frac{3}{8} =$

10. $\frac{2}{5} \times \frac{5}{9} =$

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

2. $\frac{1}{2} \times \frac{2}{3} =$

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

4. $\frac{7}{12} \times \frac{2}{3} =$

5. $\frac{4}{5} \times \frac{1}{6} =$

6. $\frac{1}{4} \times \frac{5}{7} =$

7. $\frac{3}{8} \times \frac{4}{5} =$

8. $\frac{4}{9} \times \frac{1}{4} =$

9. $\frac{5}{6} \times \frac{3}{8} =$

10. $\frac{2}{5} \times \frac{5}{9} =$



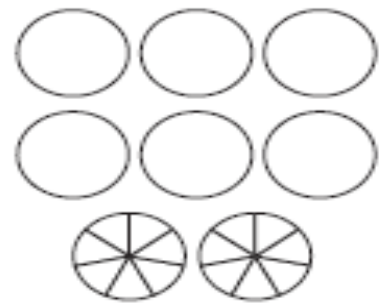
- 1) This diagram represents an integer being multiplied by a fraction. Shade in the diagram to show the correct answer and write it down as a simplified mixed number.

a)  $4 \times \frac{2}{3} = \frac{\boxed{}}{\boxed{}} \text{ or } \boxed{} \frac{\boxed{}}{\boxed{}}$

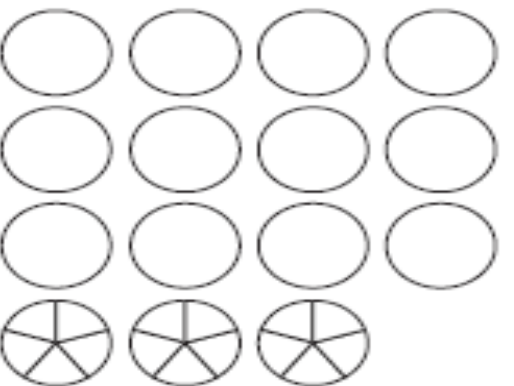
b)  $5 \times \frac{3}{5} = \frac{\boxed{}}{\boxed{}} \text{ or } \boxed{}$

c)  $3 \times \frac{5}{8} = \frac{\boxed{}}{\boxed{}} \text{ or } \boxed{} \frac{\boxed{}}{\boxed{}}$

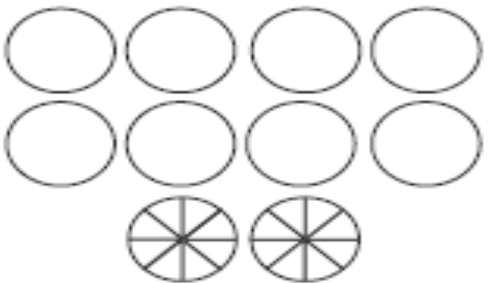
- 2) This diagram shows the partitioning method of multiplying an integer by a mixed number. Shade in the diagram to show the correct answer and write it down as a simplified mixed number.

a) 

$$2 \times 3 \frac{4}{7} = \boxed{} \frac{\boxed{}}{\boxed{}}$$

b) 

$$3 \times 4 \frac{3}{5} = \boxed{} \frac{\boxed{}}{\boxed{}}$$

c) 

$$2 \times 4 \frac{6}{8} = \boxed{} \frac{\boxed{}}{\boxed{}}$$

Weds- Squares

- 1) This diagram represents an integer being multiplied by a fraction.

Shade in the diagram to show the correct answer and write it down as a simplified mixed number.



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

or



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

or



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

or



- 2) This diagram shows the partitioning method of multiplying an integer by a mixed number. Shade in the diagram to show the correct answer and write it down as a simplified mixed number.



$$2 \times 3 \frac{4}{7} =$$

$$3 \times 4 \frac{3}{5} =$$

$$2 \times 4 \frac{6}{8} =$$

- 1) This diagram represents an integer being multiplied by a fraction. Shade in the diagram to show the correct answer and write it down as a simplified mixed number.



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

or



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

or



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

or



- 2) This diagram shows the partitioning method of multiplying an integer by a mixed number. Shade in the diagram to show the correct answer and write it down as a simplified mixed number.



$$2 \times 3 \frac{4}{7} =$$

$$3 \times 4 \frac{3}{5} =$$

$$2 \times 4 \frac{6}{8} =$$

Class- Mrs Cooper
Weds
Hexagons...

Squares Extension

$$\frac{14}{50}$$

X

$$\frac{25}{35}$$

$$\frac{21}{50}$$

X

$$\frac{10}{63}$$

$$\frac{24}{30}$$

X

$$\frac{5}{18}$$

$$\frac{54}{90}$$

X

$$\frac{72}{81}$$

$$\frac{42}{45}$$

X

$$\frac{15}{36}$$

$$\frac{18}{27}$$

X

$$\frac{9}{16}$$

$$\frac{13}{80}$$

X

$$\frac{20}{65}$$

$$\frac{85}{108}$$

X

$$\frac{45}{55}$$

2) Which calculation is the odd one out and why?

$$5 \times 2 \frac{4}{6} =$$

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

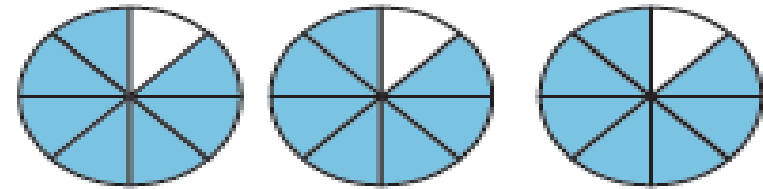
$$5 \times 4 \frac{4}{5} =$$

EW plan-Octagons-
do you want to use this?

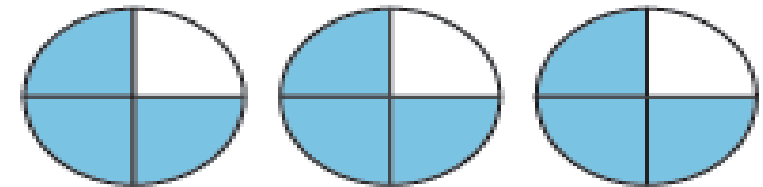
1) I am allowed to spend up to one hour watching TV in the evening. On each of Monday, Wednesday and Saturday, I spent 50 minutes out of my allowed hour watching TV.



Which diagram and calculation correctly represents the time I spent watching TV each night? Explain your reasoning.



$$3 \times \frac{5}{6} = \frac{15}{6} \text{ or } 2 \frac{3}{6} \text{ or } 2 \frac{1}{2} \text{ hours}$$



$$3 \times \frac{3}{4} = \frac{9}{4} \text{ or } 2 \frac{1}{4} \text{ hours}$$

3)

Using each of the digits 1 to 6 only once investigate completing these multiplication statements.

a) $? \times ? \frac{?}{?} =$ greatest possible answer. (Don't make an improper fraction within a mixed number.)

b) $? \times ? \frac{?}{?} =$ mixed number answer with $\frac{1}{2}$ as the fraction

Problem Solving 1

There are 5 children at a party.

Each child needs 3 pies plus an extra $\frac{1}{10}$ of another pizza.

How many pizzas need to be ordered?



plenary

Problem Solving 1

There are 5 children at a party.

Each child needs 3 pies plus an extra $\frac{1}{10}$ of another pizza.

How many pizzas need to be ordered?

$$5 \times 3 \frac{1}{10} =$$

$$\frac{5}{1} \times \frac{31}{10} = \frac{155}{10} = 15 \frac{5}{10}$$

16 pizzas need to be ordered.
Can the answer be simplified?





Revision

Three Decimal Places



Whiteboards

Three Decimal Places

Diving



What are the values of the underlined digits in the following numbers?

45.173

8.280

20.63

101.003



What are the values of the underlined digits in the following numbers?

45. <u>1</u> 73	8.2 <u>8</u> 0	20. <u>6</u> 3	101.00 <u>3</u>
one tenth	eight hundredths	six tenths	three thousandths



Write the decimal number shown on this place value chart.

Tens	Ones	tenths	hundredths	thousandths
●●	●	●●●●●	●	●●●

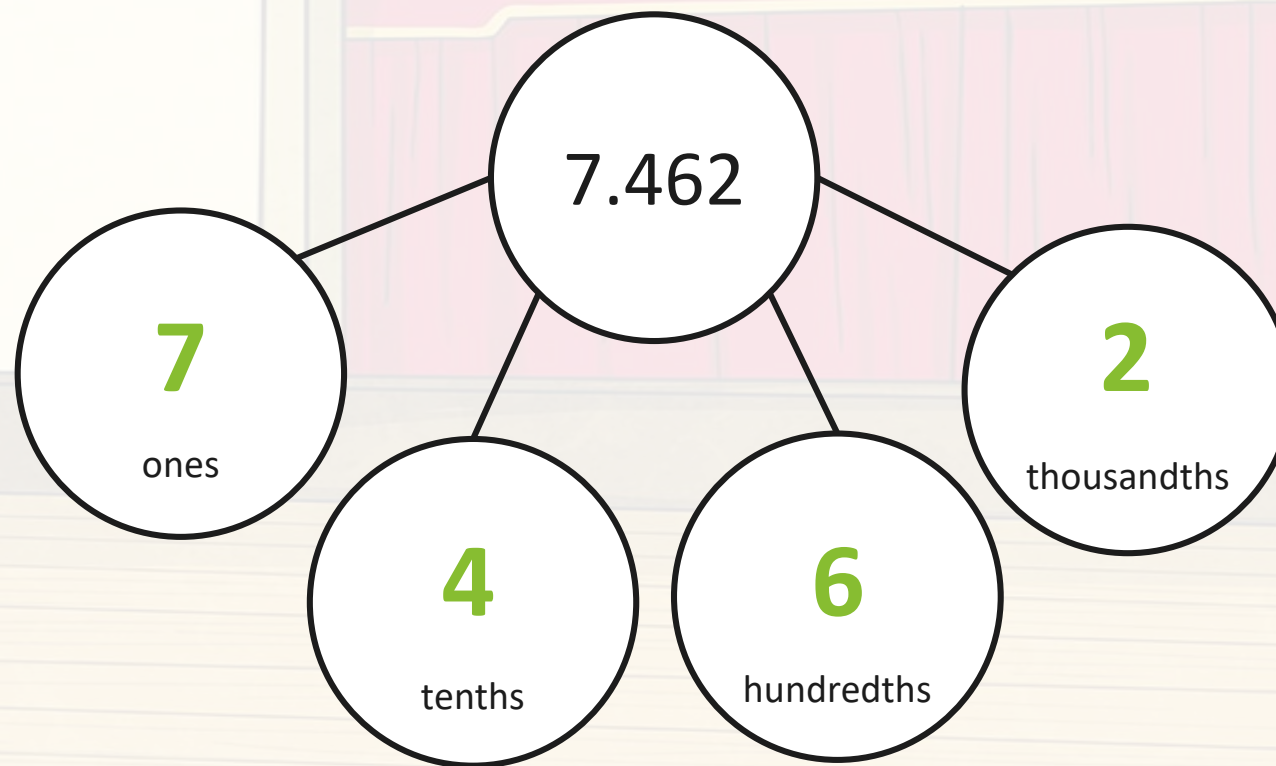
21.513

Round to nearest tenth!

Round to nearest whole no!



Complete the decimal part-whole model.



Can you find different ways to do this?



Toby thinks he has correctly matched the decimal numbers to the shapes using the clues given.

Is Toby correct? Explain your reasoning.

Decimal Numbers		Shapes
3.902	→	
2.092	↘	
9.390	↗	
0.392	↗	

Clues:

- The triangle has two thousandths. The star has the same number of ones as thousandths.
- The lightning bolt has less ones than tenths.
- The heart has 90 thousandths.

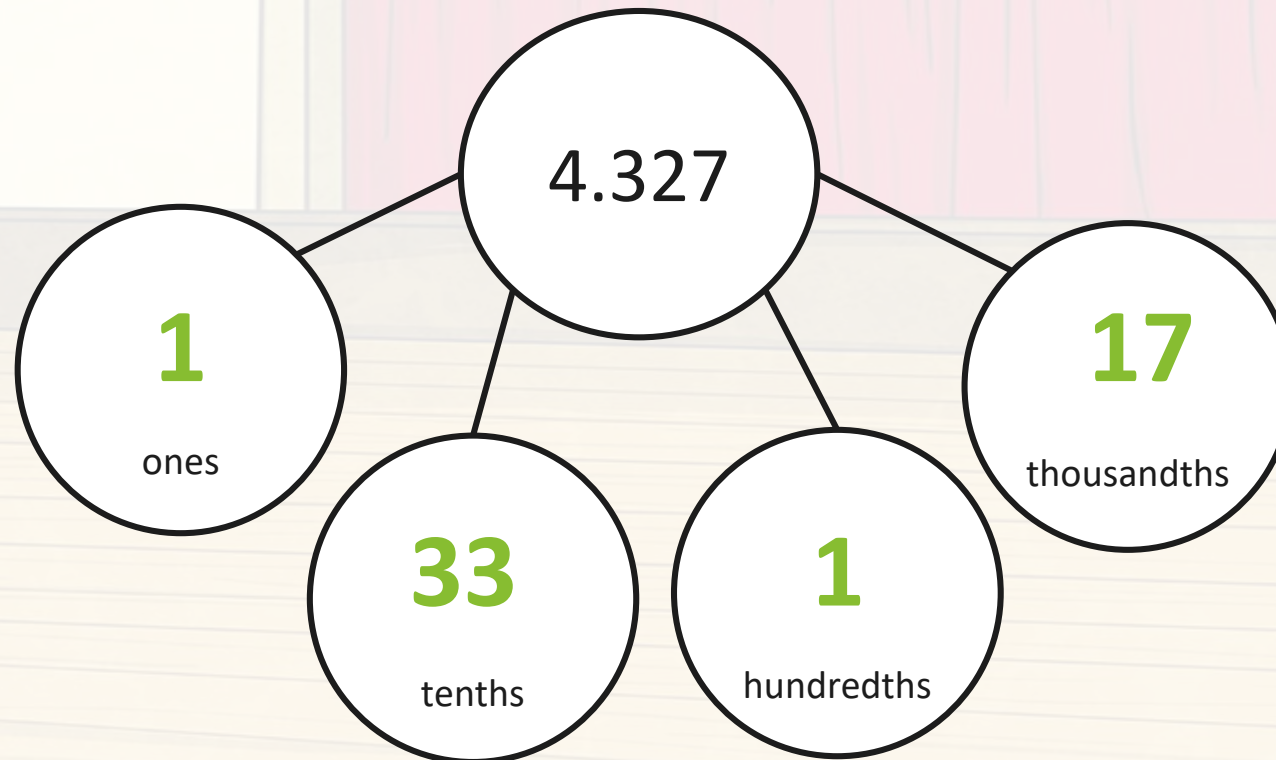
Three Decimal Places

Deepest



Find four different ways to partition this decimal number using exchanging. Try to use different numbers each time.

Share your answers with a partner. If you have an answer different to your partner, score one point. Who scored the most points?



Compare Decimals

Use $<$, $>$ or $=$ to compare the decimal numbers:

22.17	$<$	22.63
Four ones, six-tenths and two-hundredths	$=$	4.62
8.7	$>$	0.9

Compare Decimals

Write a decimal number to make each statement correct.

For the first and the last statement, there are many answers.

2.9	>	2.08
three tens, eight ones and four-hundredths	=	38.04
14.1	<	18.6