

Last lesson:

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

Last week:

Make this improper fraction a mixed number:

$$\frac{28}{5}$$

Last topic:

What was the mean amount of rainfall over the 4 days?

Mon	Tue	Wed	Thu
2mm	4mm	6mm	8mm

Last half term:

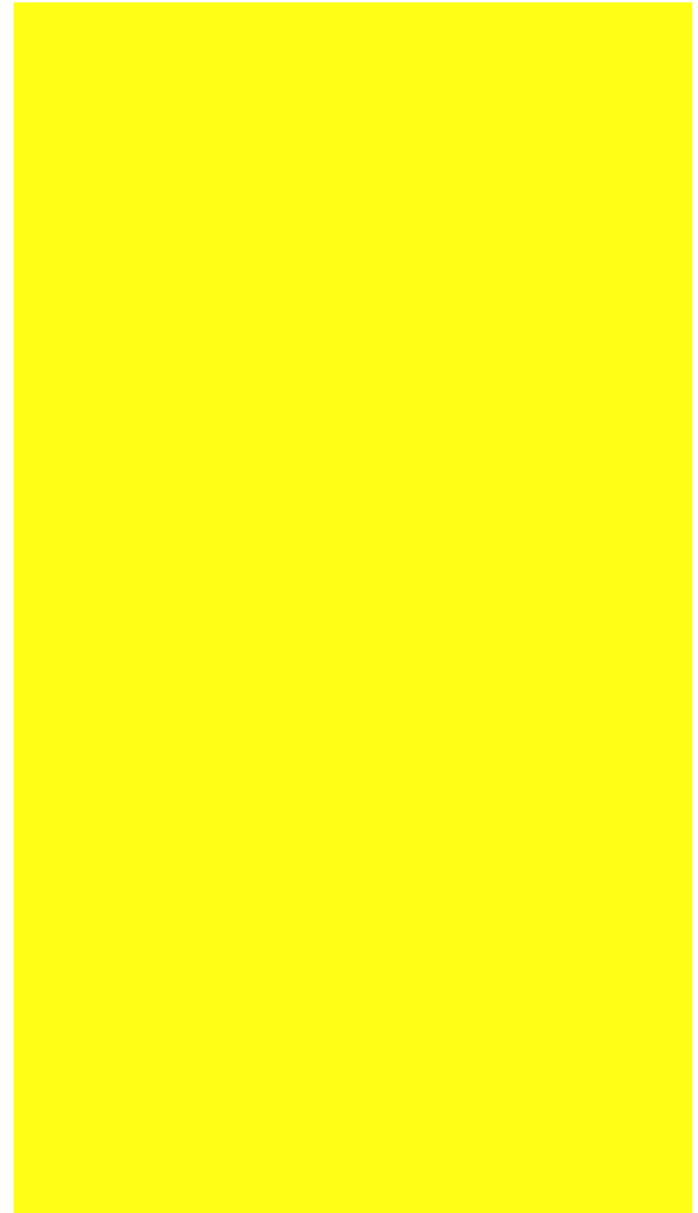
1km = 0.6 miles
2km = miles
10km = miles

1. $5\frac{2}{5} - 3\frac{6}{10} =$

2. $5\frac{3}{4} + 9\frac{3}{10} =$

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

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



22.11.21

Mixed Addition and Subtraction

Varied Fluency



Alex has 5 bags of sweets.

On Monday she eats $\frac{2}{3}$ of a bag and gives $\frac{4}{5}$ of a bag to her friend.

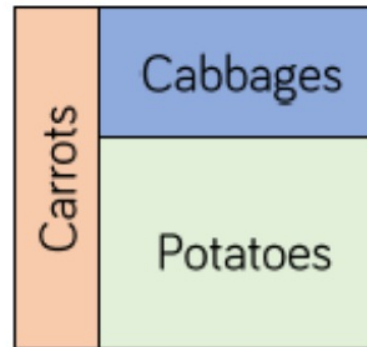
On Tuesday she eats $1\frac{1}{3}$ bags and gives $\frac{2}{5}$ of a bag to her friend.

What fraction of her sweets does Alex have left?

Give your answer in its simplest form.



Here is a vegetable patch. $\frac{1}{5}$ of the patch is for carrots. $\frac{3}{8}$ of the patch is for cabbages.



What fraction of the patch is for carrots and cabbages altogether?

What fraction of the patch is for potatoes?

What fraction more of the patch is for potatoes than cabbages?

Give your answers in their simplest form.

The vegetable patch has an area of 80 m^2

What is the area covered by each vegetable?

The mass of Annie's suitcase is $29\frac{1}{2}$ kg.

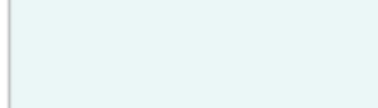
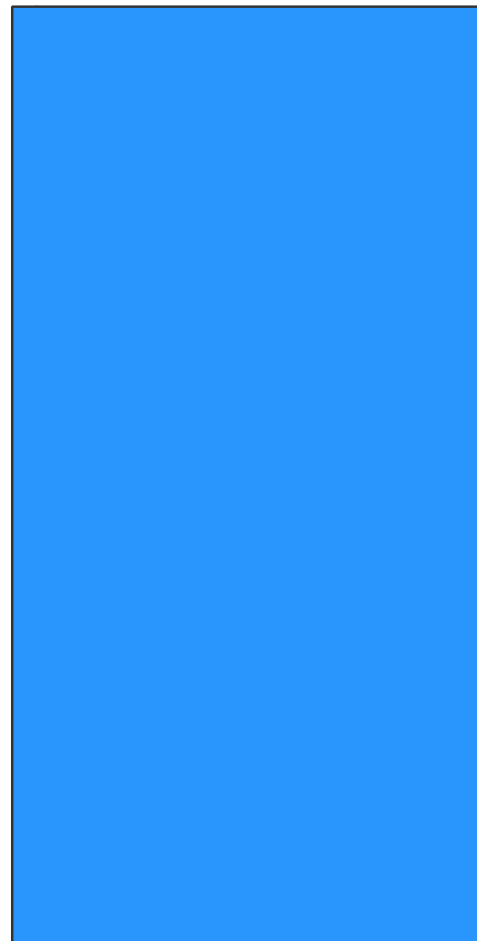
Teddy's suitcase is $2\frac{1}{5}$ kg lighter than Annie's.


How much does Teddy's suitcase weigh?

How much do the suitcases weigh altogether?

There is a weight allowance of 32 kg per suitcase.

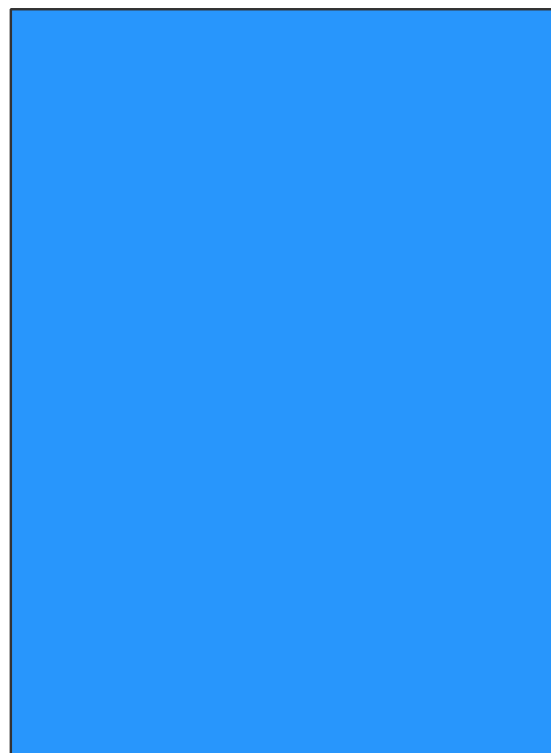
How much below the weight allowance are Annie and Teddy?



Find the value of the 

$$\text{heart} + 3\frac{4}{9} = 6\frac{1}{3}$$

$$8\frac{1}{10} - \text{heart} = \text{sun}$$



Fill in the boxes to make the calculation correct.

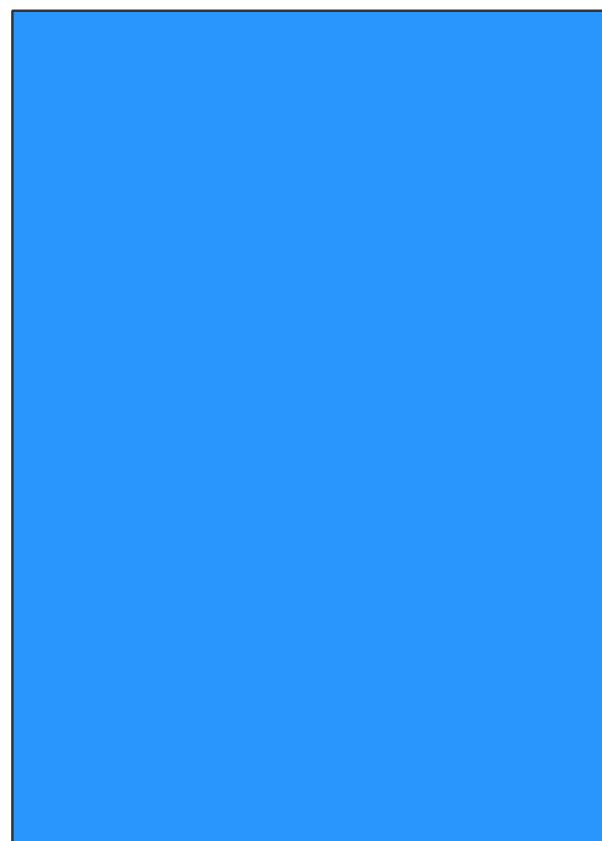
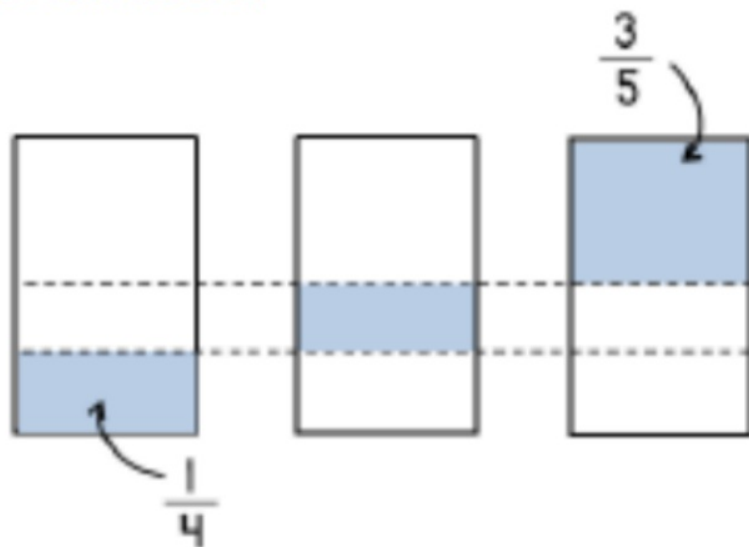
$$\frac{1}{3} \quad \frac{2}{6} \quad \frac{1}{9} \quad \frac{15}{27} \quad \frac{12}{13} \quad \frac{6}{108}$$

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



Here are 3 identical rectangles.
Part of each shape has been shaded.

What fraction of the middle shape is shaded?



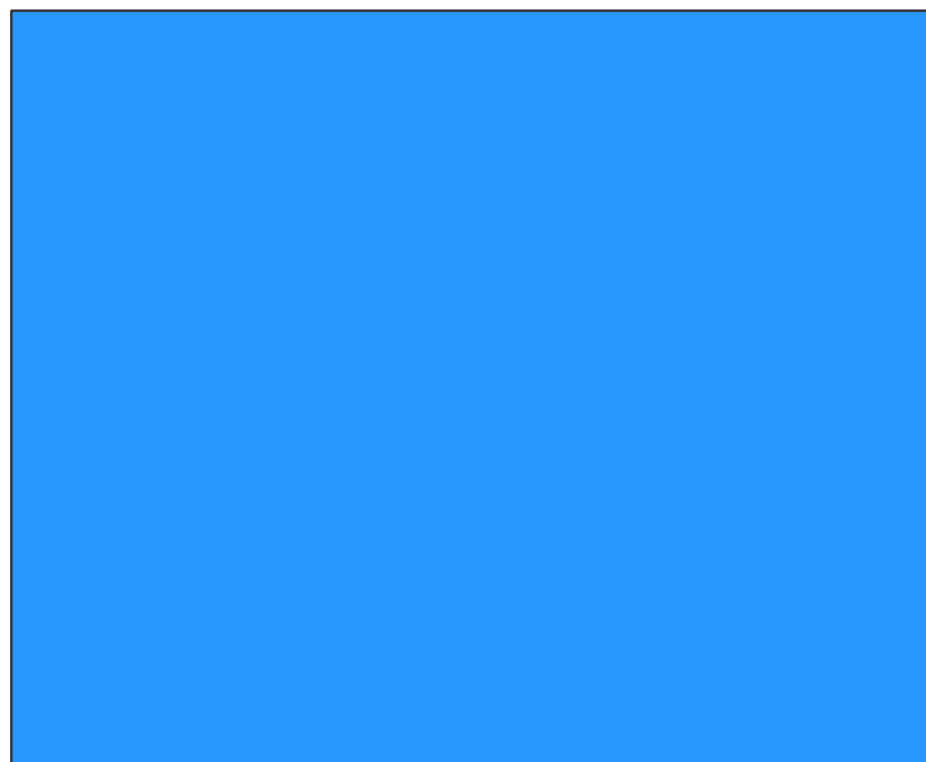
Jimmy is trying to add these fractions,

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

A suitable common denominator for this addition is 60?



Do you agree with Jimmy? Explain your reasoning.



Last lesson:

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

Last week:

Make this improper fraction a mixed number:

$$\frac{37}{6}$$

Last topic:

What was the mean amount of rainfall over the 4 days?

Mon	Tue	Wed	Thu
7mm	3mm	10mm	8mm

Last half term:

$$1\text{km} = 0.6 \text{ miles}$$

$$3\text{km} = \quad \text{miles}$$


$$20\text{km} = \quad \text{miles}$$

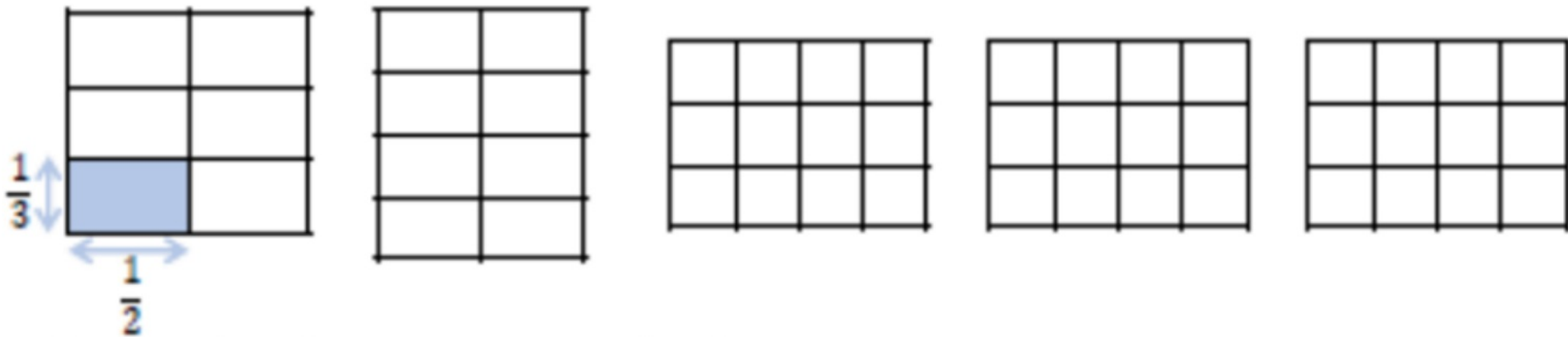
What does it look like?

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

23.11.21

Multiply Fractions by Fractions

 Alex is drawing diagrams to represent multiplying fractions.



Shade the diagrams to calculate:

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

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

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

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

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

Write your answers in their simplest form.

Fluency

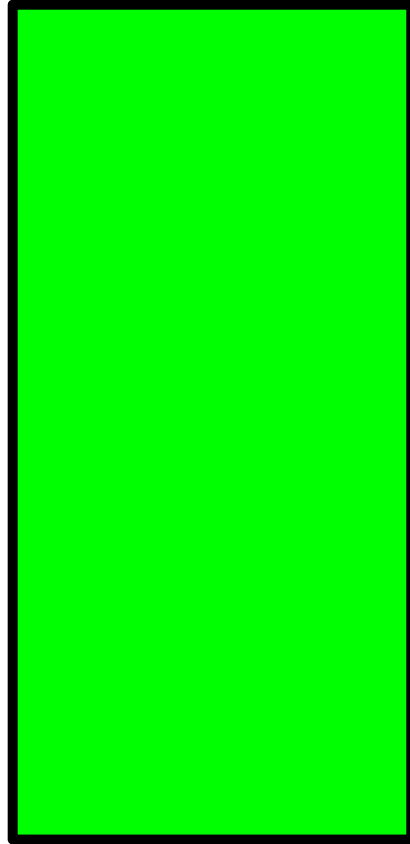
9 $\frac{1}{2} \times \frac{4}{7}$

10 $\frac{2}{5} \times \frac{5}{6}$

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

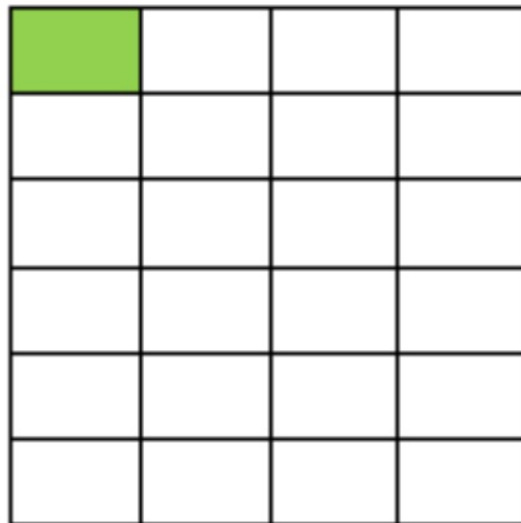
12 $\frac{4}{5} \times \frac{7}{12}$

Remember to simplify



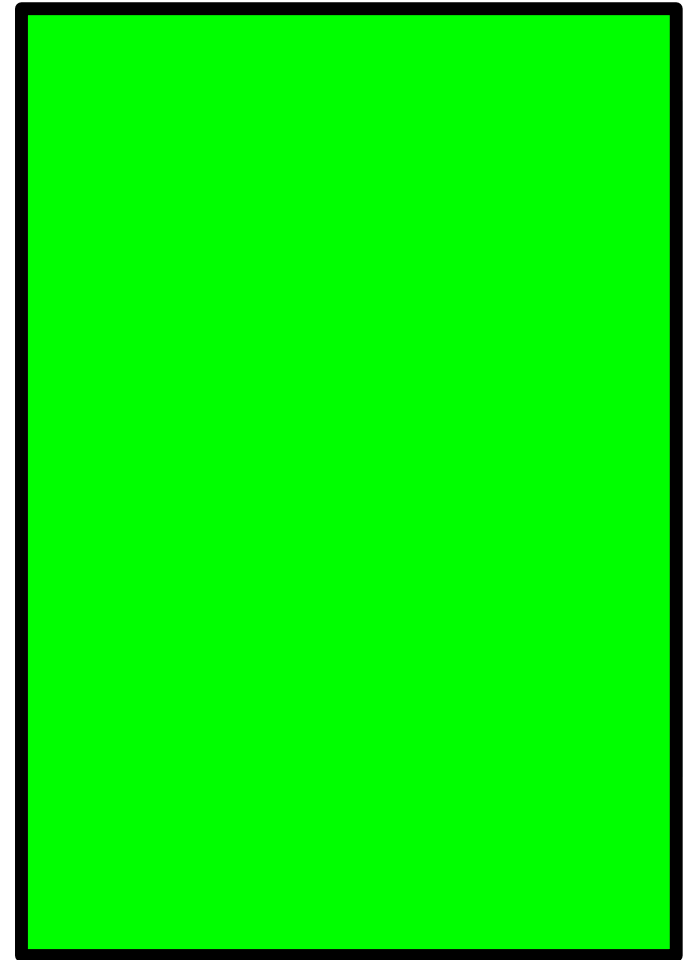
The shaded square in the grid below is the answer to a multiplying fractions question.

What was the question?

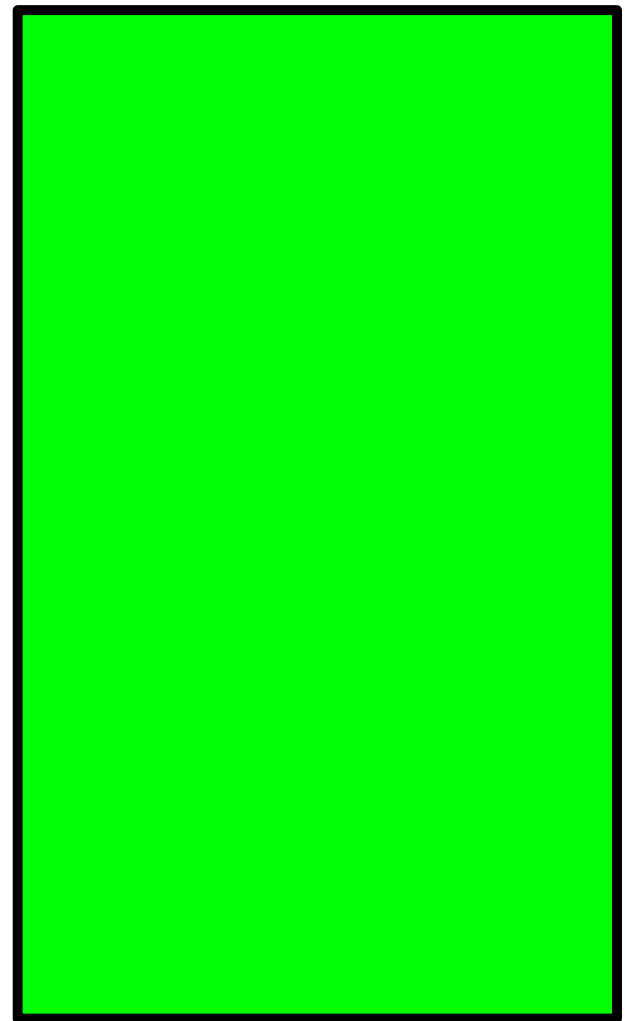
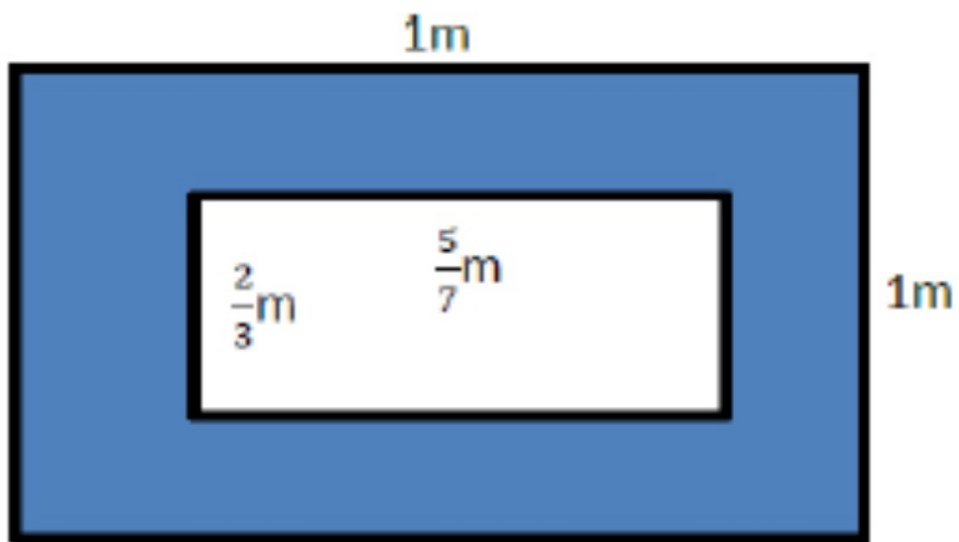


How many ways can you answer the following?

$$\frac{\text{pink splat}}{\text{blue splat}} \times \frac{3}{\text{yellow splat}} = \frac{6}{12}$$
$$= \frac{\text{green splat}}{2}$$



Find the area of the shaded part of the shape.



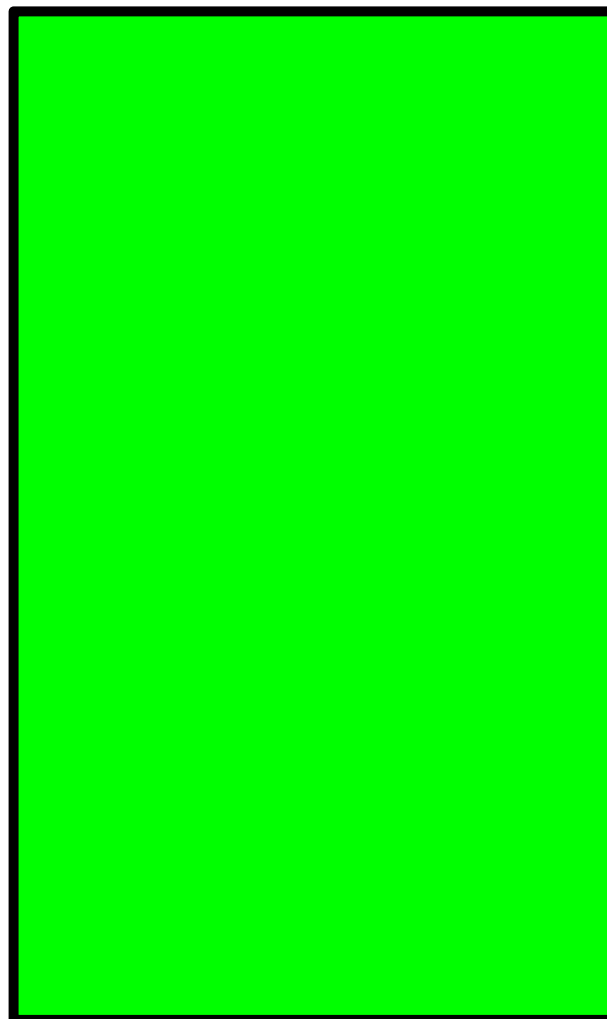
Alex says,



$\frac{1}{4} \times \frac{1}{2}$ is the same as $\frac{1}{2}$
of a quarter.

Do you agree?

Explain why.



How many ways?

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

Level 1: I can find a way

Level 2: I can find different ways

Level 3: I know how many ways there are

Last lesson:

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

Last week:

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

Last topic:

What is the mean height of these children?

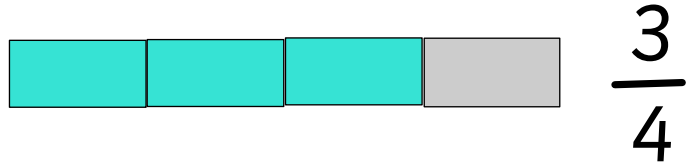
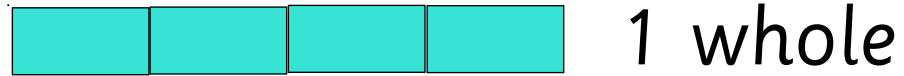
C1	C2	C3	C4	C5
80cm	60cm	70cm	110cm	80cm

Last half term:

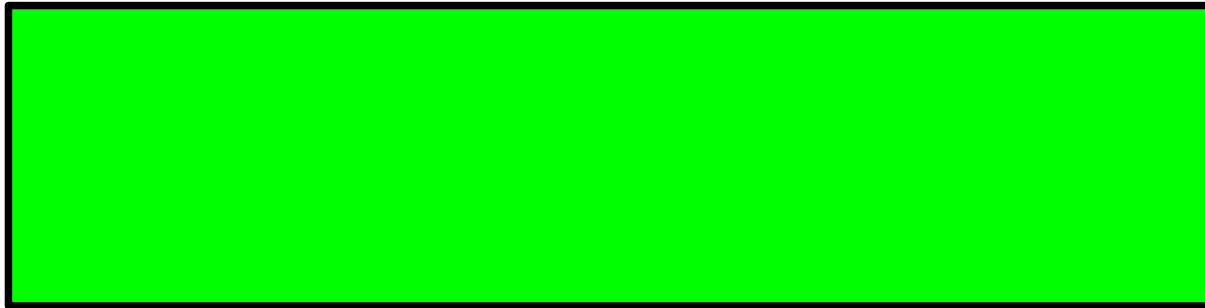
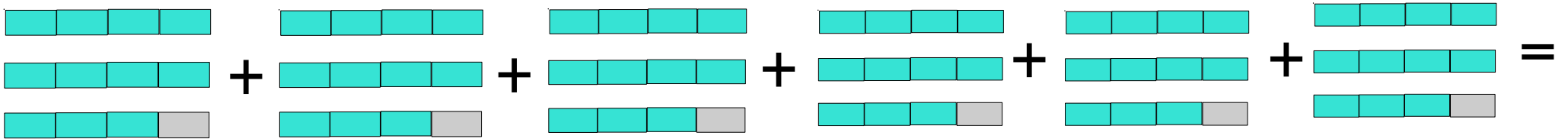
$$1 \text{ miles} = 1.6 \text{ km}$$

$$2 \text{ miles} = \text{ km}$$

$$10 \text{ miles} = \text{ km}$$




What calculation does this show?



24.11.21

Multiply Fractions by Integers

 Convert the mixed number to an improper fraction to multiply.

$$2\frac{3}{5} \times 3 = \frac{13}{5} \times 3 = \frac{39}{5} = 7\frac{4}{5}$$

Use this method to calculate:


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

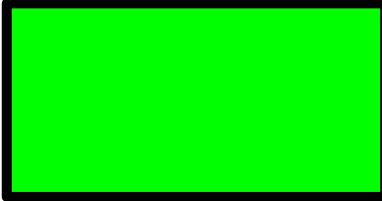
$$1\frac{5}{7} \times 3$$


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

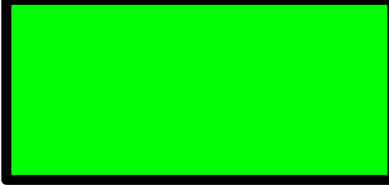
$$2 \times 1\frac{1}{6}$$

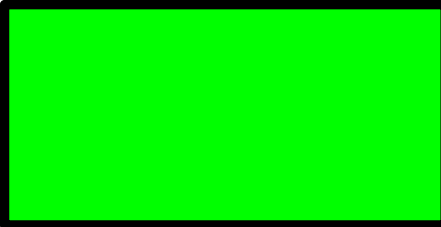
Multiplying fractions by integers

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

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

3) $6 \times \frac{7}{9} =$ 

4) $3\frac{2}{3} \times \frac{7}{9} =$ 

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

Simplified?

9 $1\frac{3}{8} \times \frac{6}{11}$

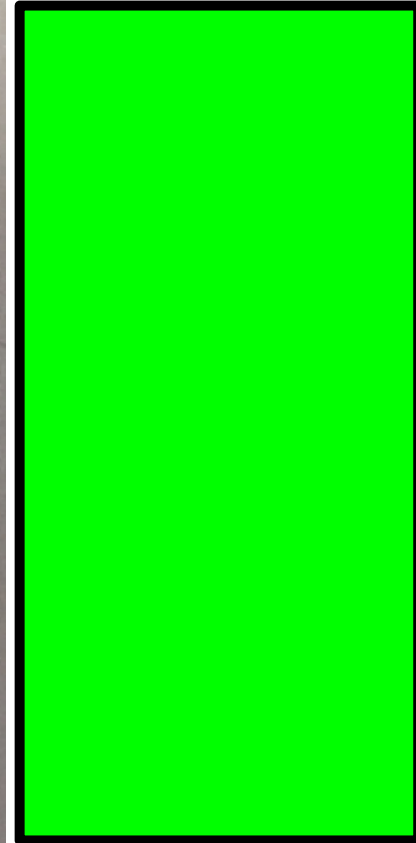
10 $3\frac{3}{5} \times \frac{1}{6}$

11 $3\frac{1}{3} \times \frac{2}{5}$

12 $4\frac{1}{2} \times \frac{11}{12}$

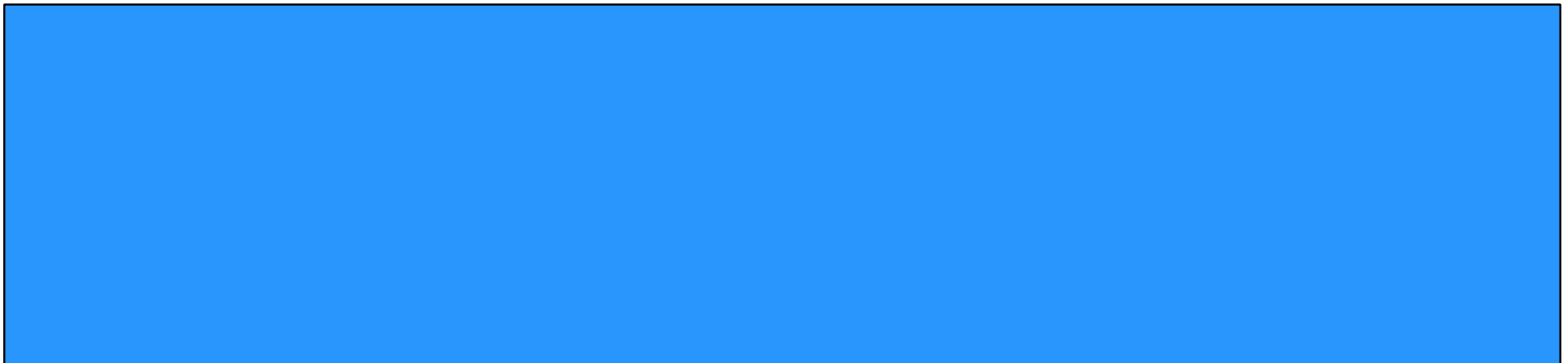
13 $5\frac{4}{7} \times \frac{2}{9}$

14 $2\frac{7}{10} \times \frac{2}{3}$



Explain the mistake

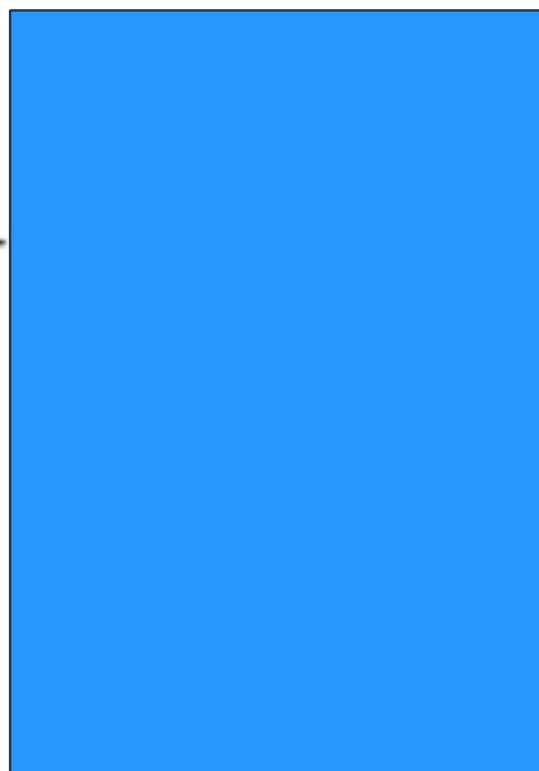
$$\frac{3}{4} \times 5 = \frac{15}{20}$$




There are 9 lamp posts on a road. There is $4\frac{3}{8}$ of a metre between each lamp post.

What is the distance between the first and last lamp post?

.....



Use pattern blocks, if  is equal to 1 whole, work out what fraction the other shapes represent.

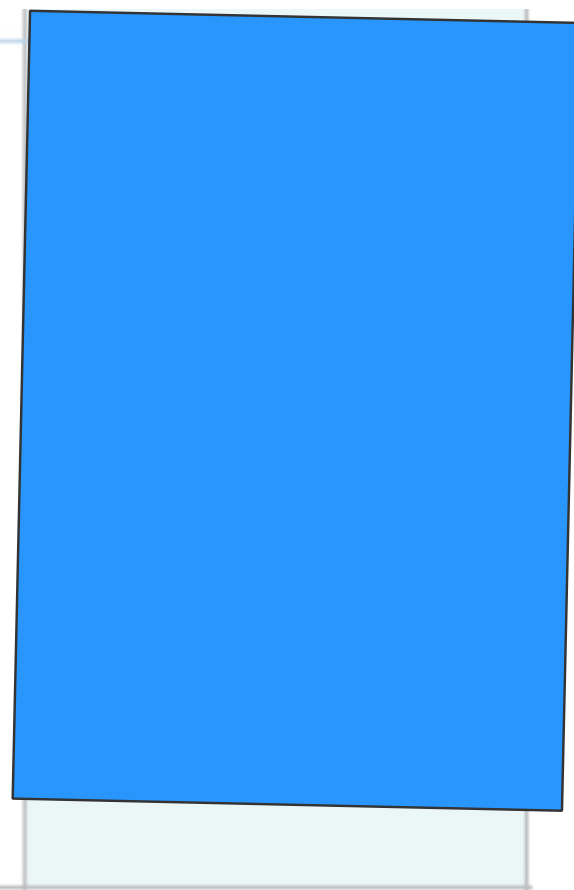
Use this to calculate the multiplications.

Give your answers in their simplest form.

 $\times 5 =$

 $\times 5 =$

 $\times 5 =$



Eva and Amir both work on a homework project.



Eva

I spent $4\frac{1}{4}$ hours a week
for 4 weeks doing my
project.

I spent $2\frac{3}{4}$ hours a week
for 5 weeks doing my
project.



Amir

Who spent the most time on their project?

Explain your reasoning.



Last lesson:

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

Last week:

Simplify

$$\frac{39}{7} =$$

Last topic:

What is the mean shoe size of these children?

C1	C2	C3	C4	C5
3	4	4	5	3

C6	C7	C8
4	5	4

Last half term:

$$1.6 \text{ miles} = 1 \text{ km}$$


$$10 \text{ miles} = \quad \text{km}$$

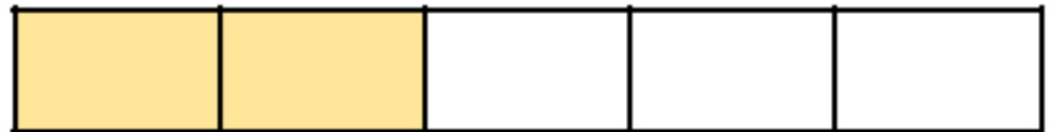
$$20 \text{ miles} = \quad \text{km}$$


25.11.21

Divide Fractions by Integers

Varied Fluency

-  Dexter has $\frac{2}{5}$ of a chocolate bar. He shares it with his friend. What fraction of the chocolate bar do they each get?

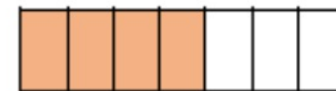


-  Use the diagrams to help you calculate.

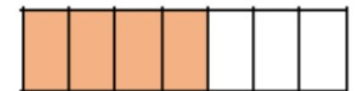
$$\frac{3}{4} \div 3 =$$



$$\frac{4}{7} \div 4 =$$



$$\frac{4}{7} \div 2 =$$



-  Calculate.

$$\frac{1}{11} \div 1 =$$

$$\frac{2}{11} \div 2 =$$

$$\frac{3}{11} \div 3 =$$

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

$$\frac{2}{11} \div 2 =$$

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

$$\frac{6}{11} \div 2 =$$

$$\frac{8}{11} \div 2 =$$

$$\frac{3}{11} \div 3 =$$

$$\frac{6}{11} \div 3 =$$

$$\frac{9}{11} \div 3 =$$

$$1\frac{1}{11} \div 3 =$$

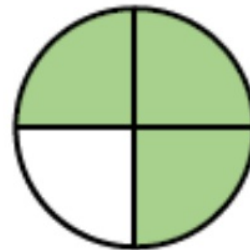
Varied Fluency

- Lee has $\frac{2}{5}$ of a chocolate bar. He shares it with his friend. What fraction of the chocolate bar do they each get?

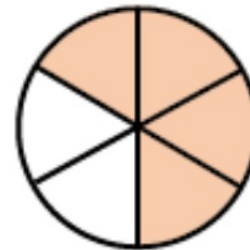


- Use the diagrams to help you calculate.

$$\frac{3}{4} \div 3$$



$$\frac{4}{6} \div 2$$



- Calculate.

$$\frac{6}{8} \div 2$$

$$\frac{10}{13} \div 5$$

$$\frac{6}{7} \div 3$$

Varied Fluency

Calculate:

$$\frac{7}{8} \div 2$$



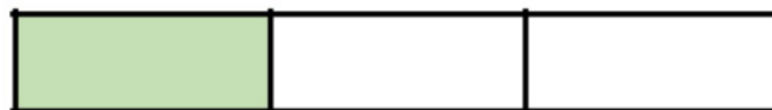
$$\frac{2}{3} \div 2$$



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



$$\frac{1}{3} \div 3$$



What do you notice?

Is there another strategy you could use to solve these calculations?

Calculate:

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

$$\frac{7}{9} \div 3$$

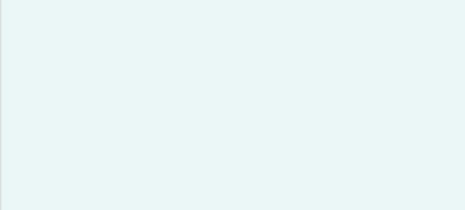
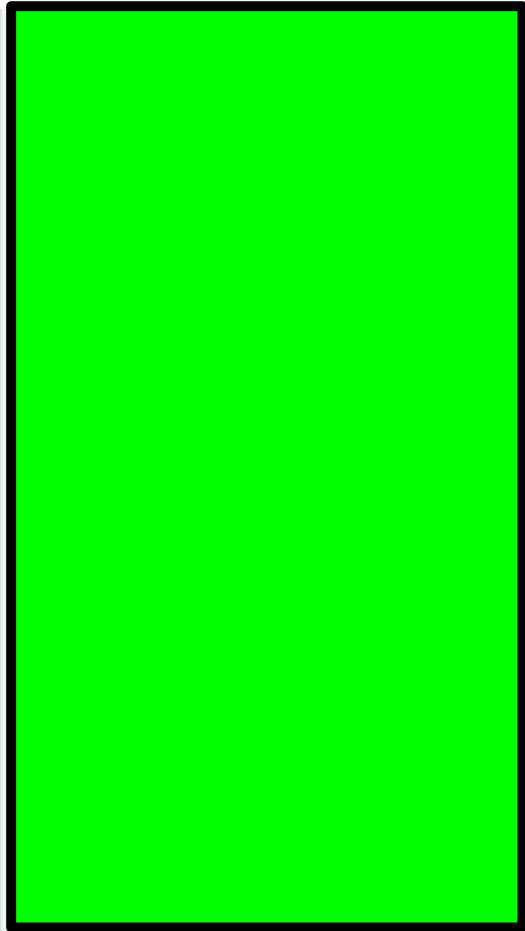
$$\frac{3}{8} \div 5$$

Tommy says,



When dividing fractions by a whole number, I just ignore the denominator.

Do you agree?
Explain why.



Match the equivalent calculations.

$$\frac{1}{4} \times \frac{12}{13}$$

$$\frac{1}{6} \times \frac{12}{13}$$

$$\frac{1}{2} \times \frac{12}{13}$$

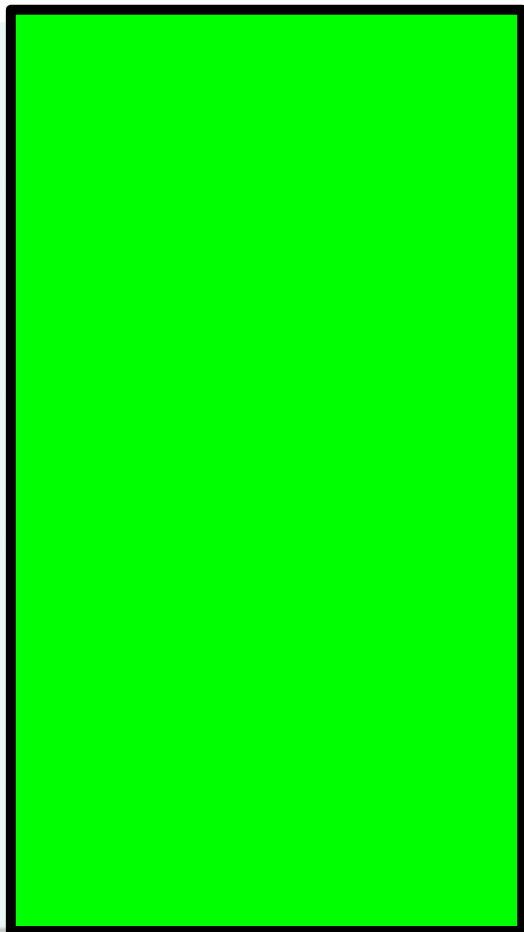
$$\frac{1}{3} \times \frac{12}{13}$$

$$\frac{12}{13} \div 2$$

$$\frac{12}{13} \div 6$$

$$\frac{12}{13} \div 4$$

$$\frac{12}{13} \div 3$$



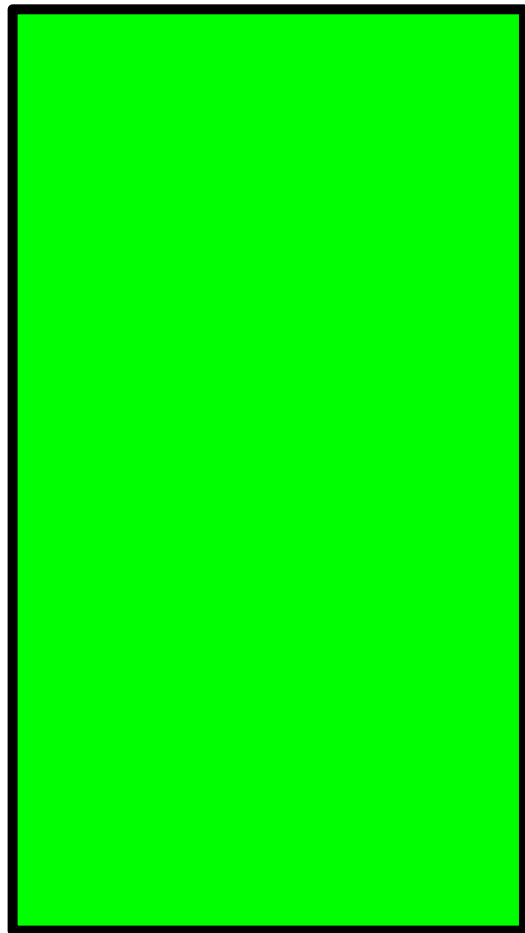
Complete the missing integers.

$$\frac{15}{16} \div \square = \frac{5}{16}$$

$$\frac{15}{16} \div \square = \frac{3}{16}$$

$$\frac{20}{23} \div \square = \frac{4}{23}$$

$$\frac{20}{23} \div \square = \frac{5}{23}$$



Rosie walks for $\frac{3}{4}$ of an hour over 3 days.

She walks for the same amount of time each day.

How many minutes does Rosie walk each day?

