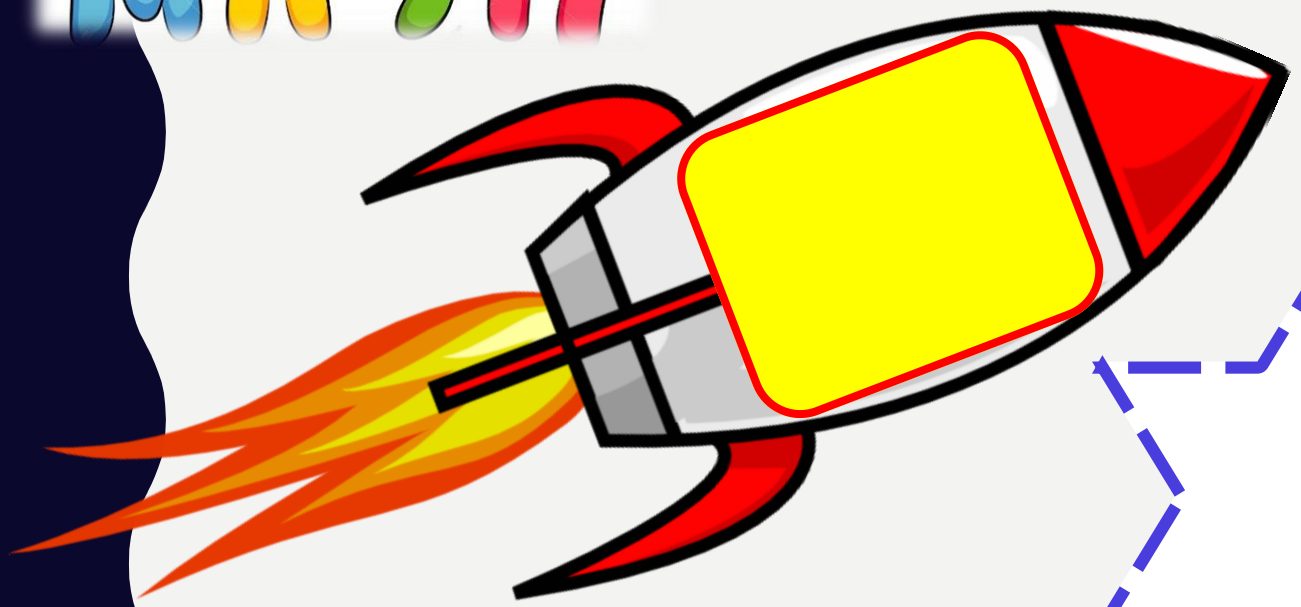
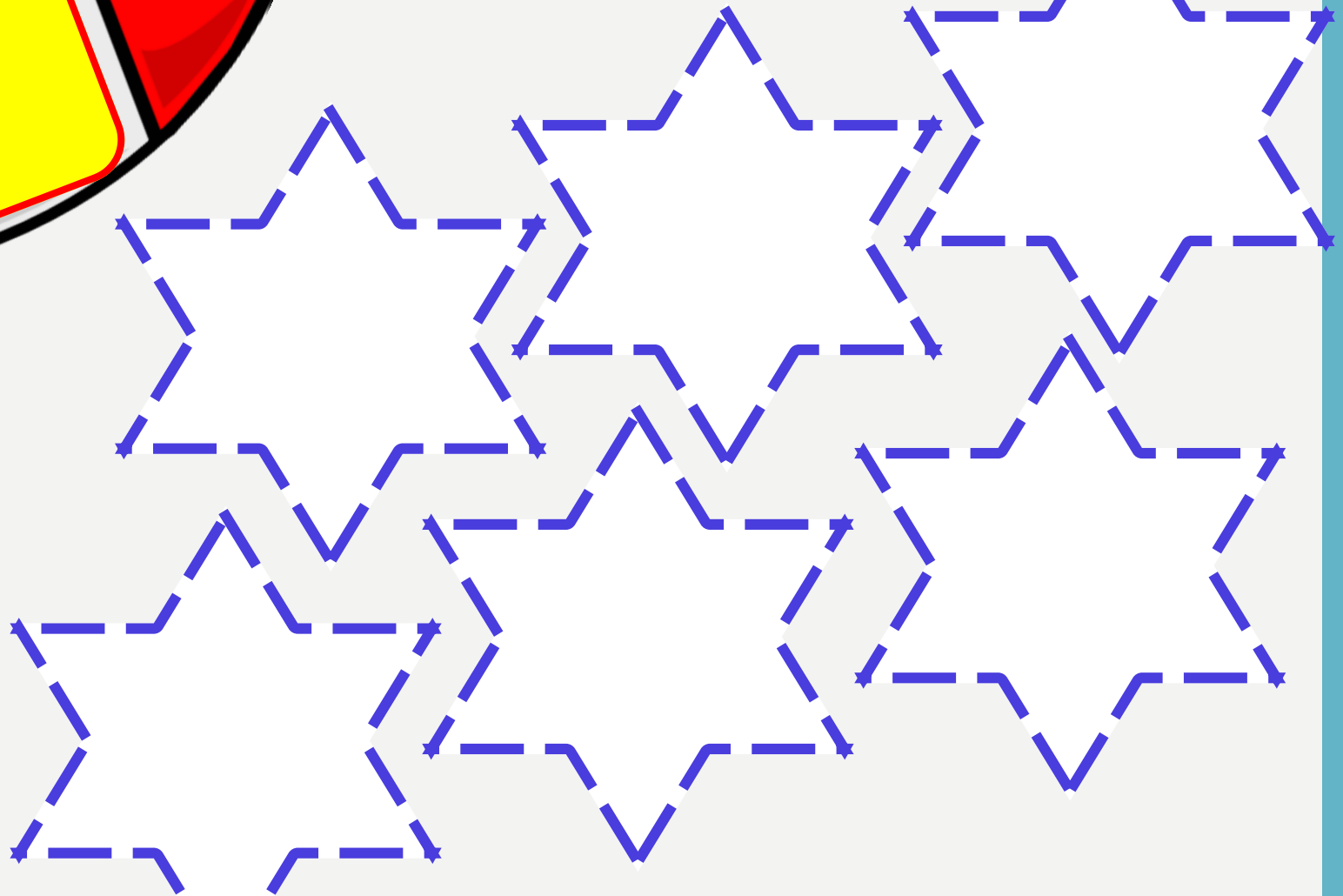
Mathematician of the day!

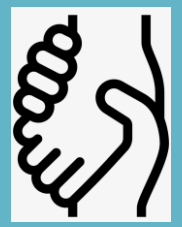




NAILED IT!
✓

Presentation watch...

Silky's Circle

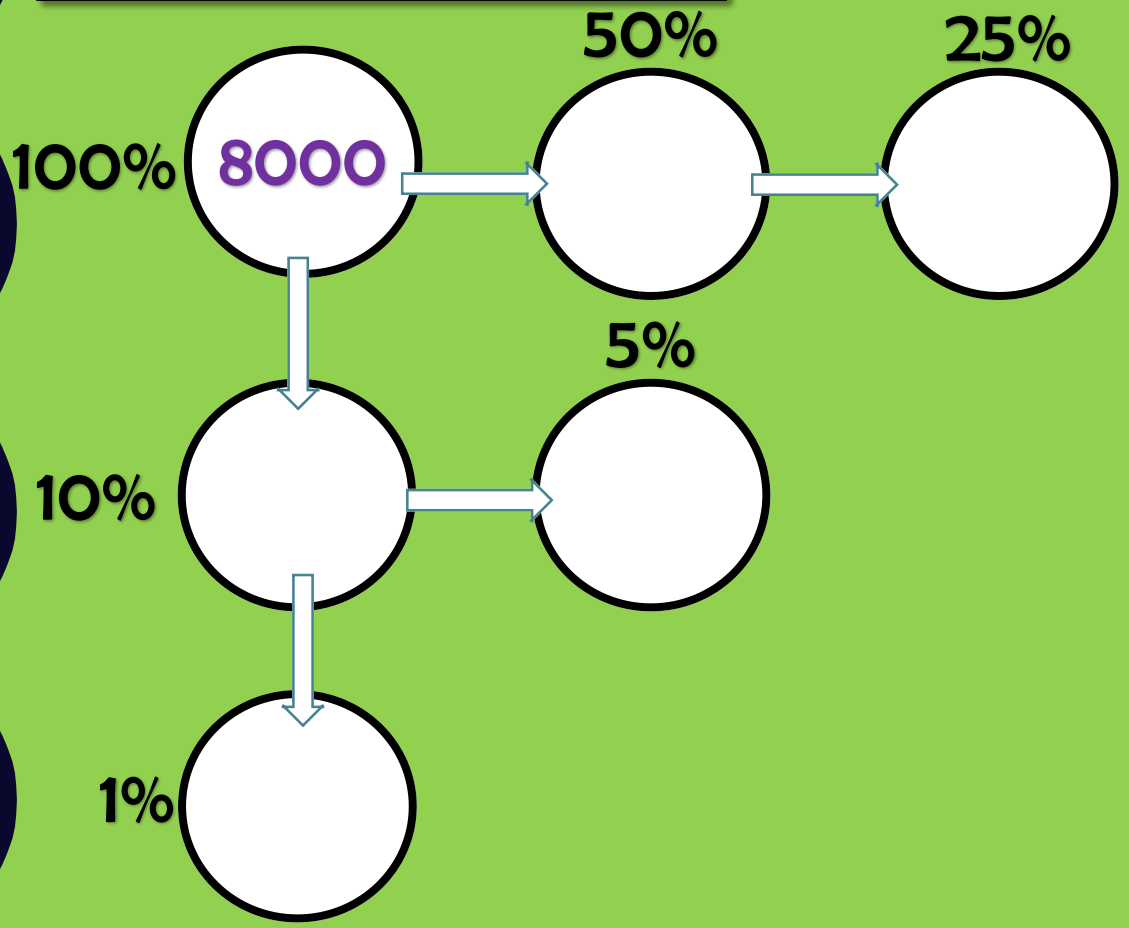


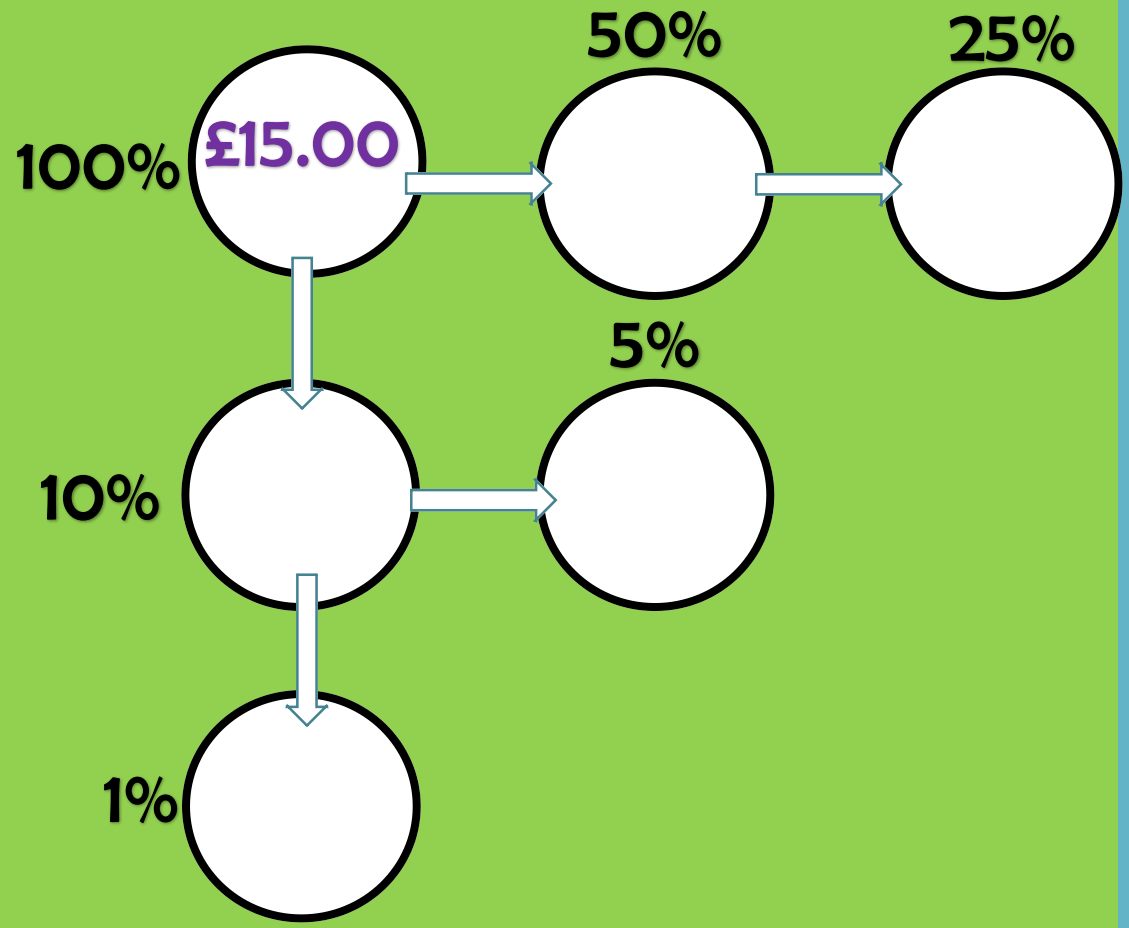
Non-negotiables

The KC SPOTLIGHT

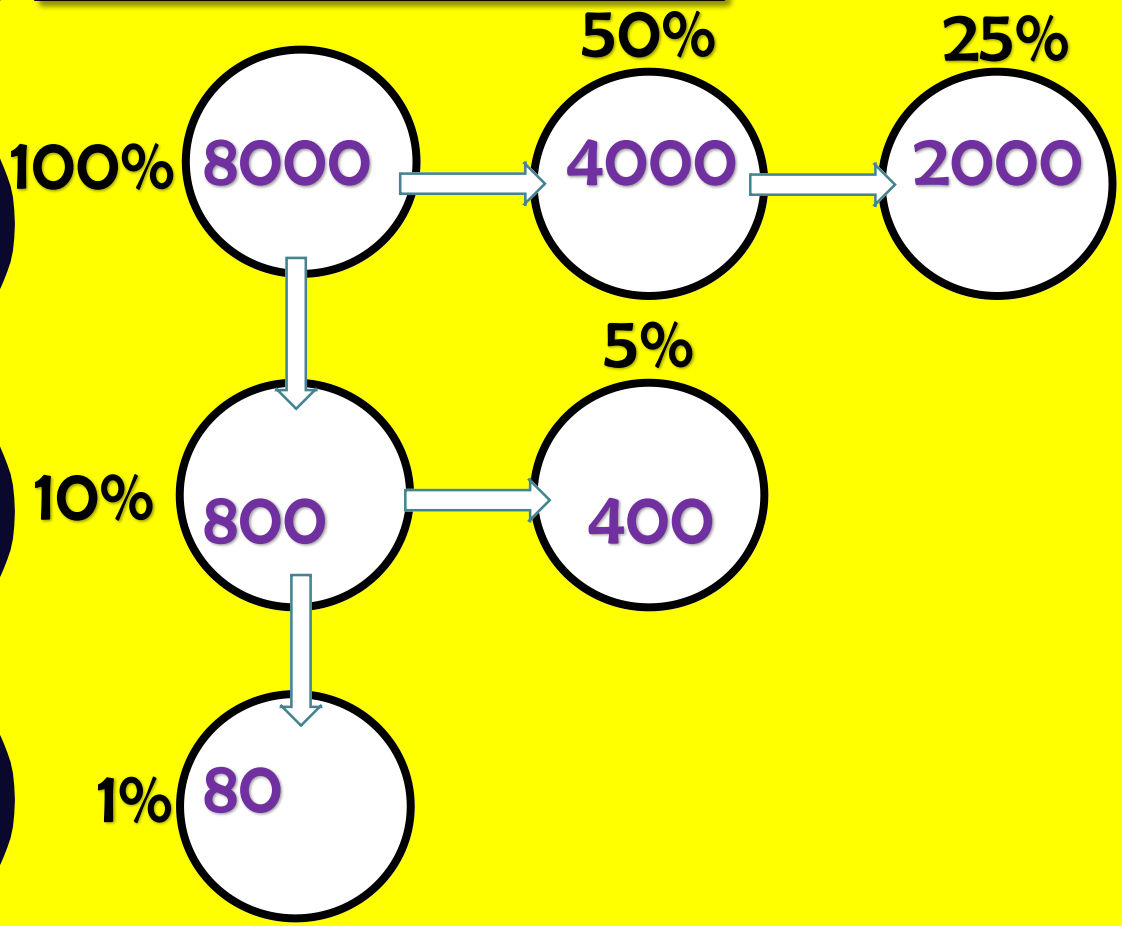
RECALL

27.01.22





RECALL


100%
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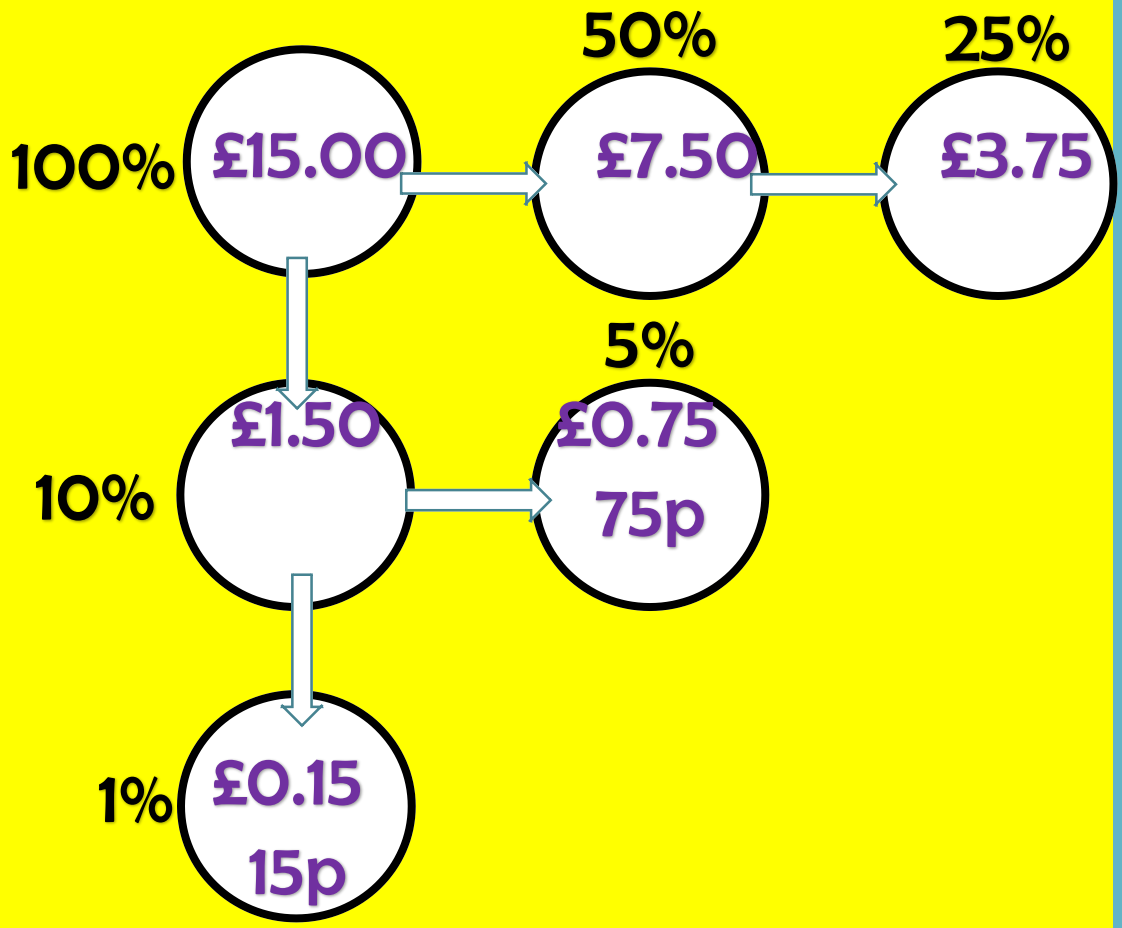
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10%
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5%
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75p
1%
£0.15
15p

L.O. - TO SOLVE A RANGE OF PROBLEMS INVOLVING FDP.

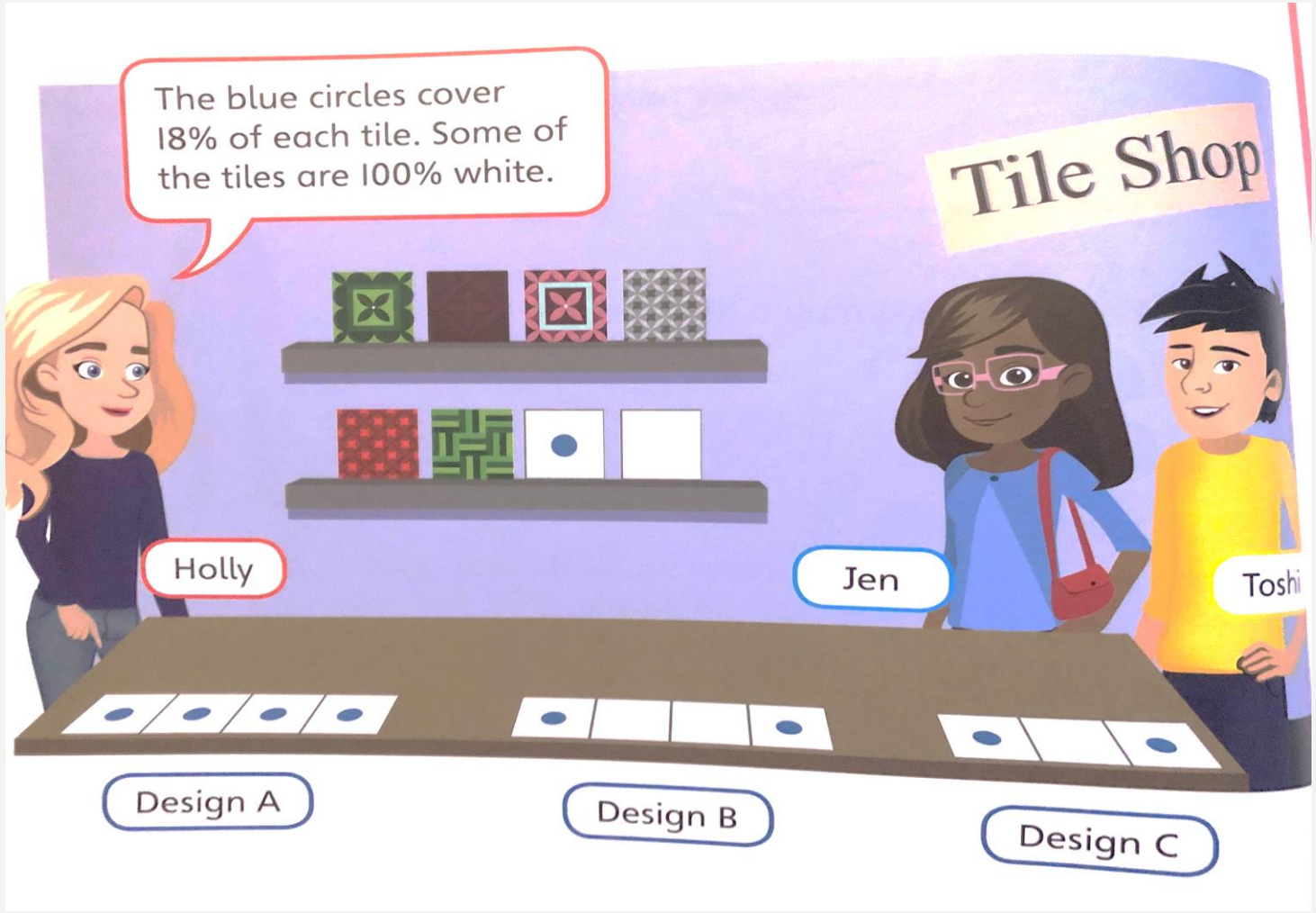
SOME WILL EVEN: Solve a variety of problems involving FDPs.

SOME WILL: Use knowledge of equivalent FDP to solve problems.

MOST WILL: Calculate missing percentage values.

ALL WILL: Use diagrams (bar model, percentage webs etc.) to help calculate.

GUIDED PRACTICE –MY TURN



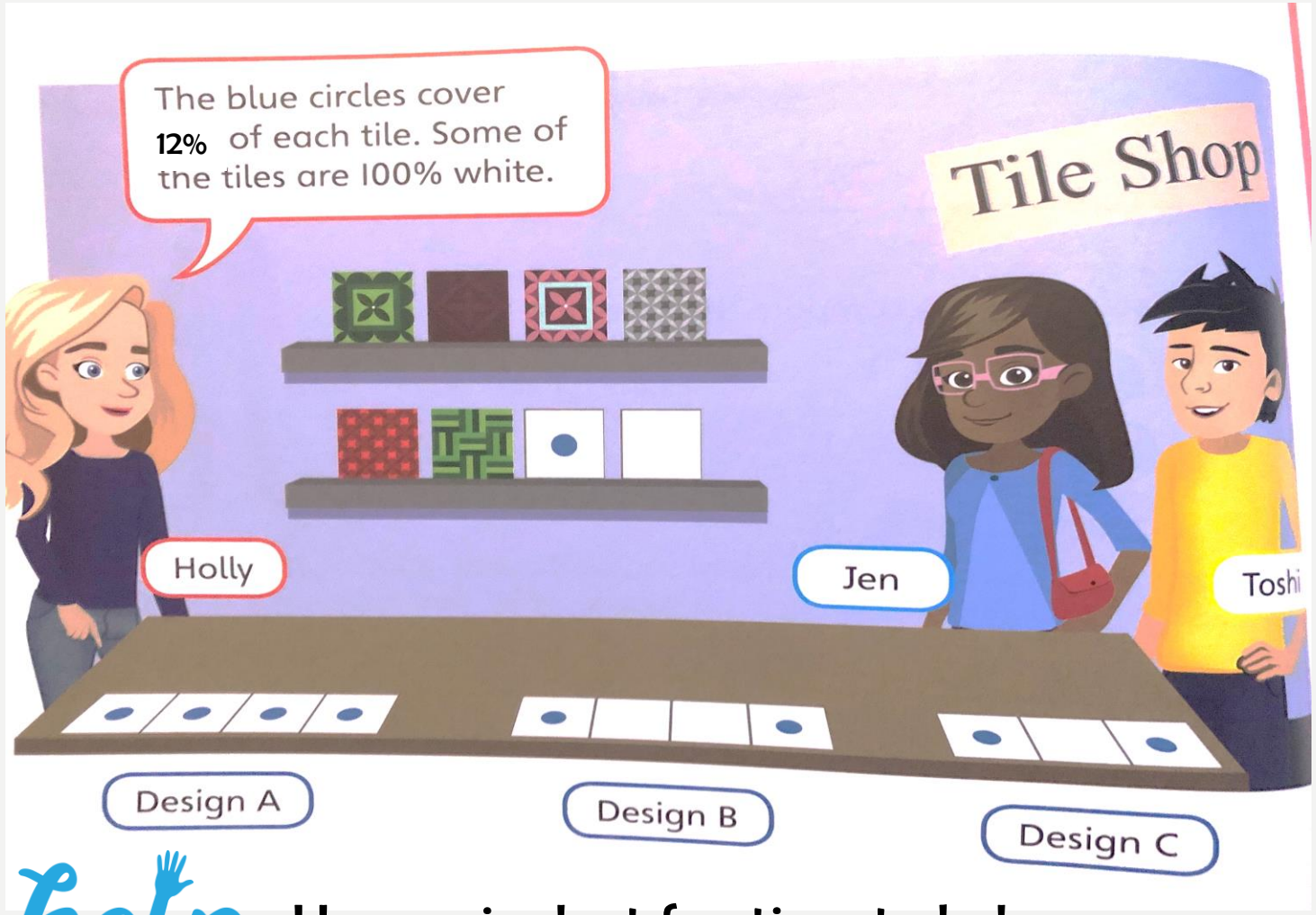
1) What percentage of Design A is blue?

2)Find the percentage of Design B and C that are blue.

help

Use equivalent fractions to help you.

GUIDED PRACTICE –MY TURN



1) What percentage of Design A is blue?

2)Find the percentage of Design B and C that are blue.

help Use equivalent fractions to help you.

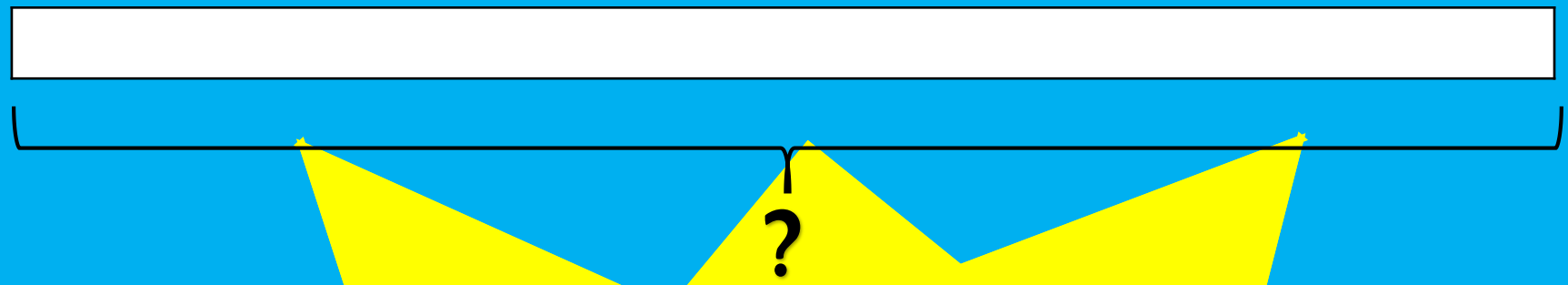
CHALLENGE! What about if 22% of the tile was blue? Recalculate for each design.

Intelligent Practice

10% of _____ = 3

20% of _____ = 5

25% of _____ = 30



Use this method to find these missing values:

40% of _____ = 20 5% of _____ = 120

3% of _____ = 12

Intelligent Practice

10% of __30____ = 3

3	3	3	3	3	3	3	3	3	3

?

20% of ___25____ = 5

5	5	5	5	5

?

25% of ___120____ = 30

30	30	30	30

?

Use this method to find these missing values:

40% of 50 = 20 5% of 2,400 = 120

3% of 400 = 12

DIVE DEEPER 1

1)

4a. Frankie has put these fractions, decimals and percentages in order from smallest to largest.

22%	$\frac{1}{8}$	0.25	0.4

Is she correct? Explain your answer.

2)

6b. Isaac says,

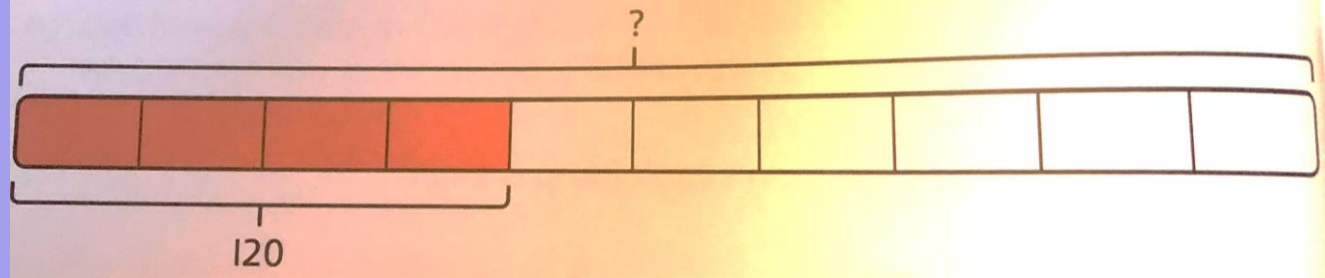
If I borrow 57% of the pencils and Julie borrows nine fifteenths, I will have the most.

Is he correct? Explain your answer.

3)

120 people arrive by bus to watch sports day. This is 40% of the spectators.

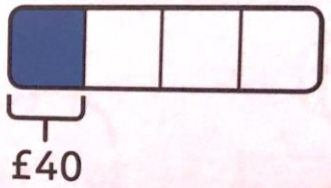
How many spectators are there in total?



4)

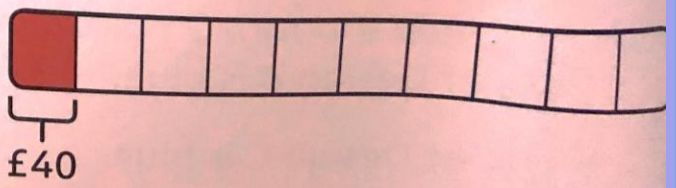
Toshi and Amal each have £40 left. How much did they each have to begin with?

I spent $\frac{3}{4}$ of my money.



Toshi

I spent 90% of my money.



Amal

DIVE DEEPER 1

1)

4a. No. The correct order is $\frac{1}{8}$, 22%, 0.25 and 0.4. This is because $\frac{1}{8}$ is equal to 0.125 and 22% is equal to 0.22.

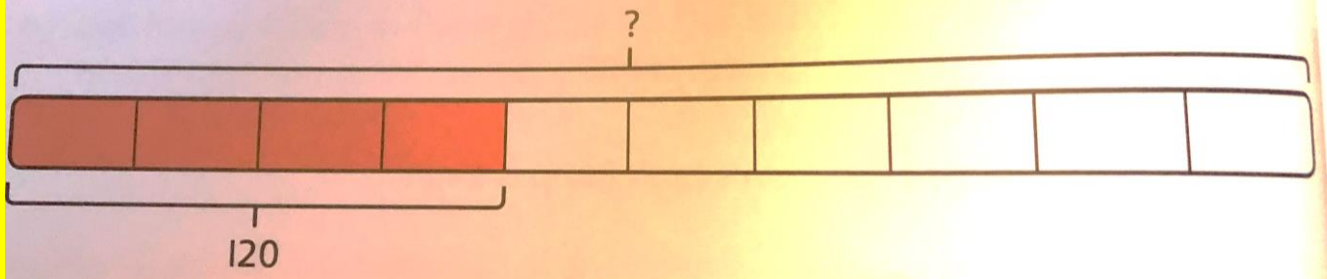
2)

6b. No, Julie has the most because $\frac{9}{15}$ is equal to 60%.

3)

120 people arrive by bus to watch sports day. This is 40% of the spectators.

How many spectators are there in total? 120 ÷ 40 = 3 x 100 = 300



4)

Toshi and Amal each have £40 left. How much did they each have to begin with?

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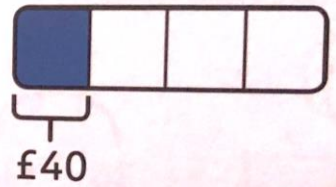
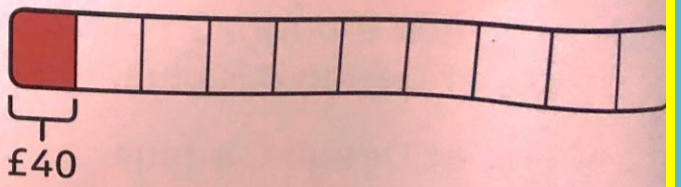
Toshi



40 x 4 = £160

I spent 90% of my money.

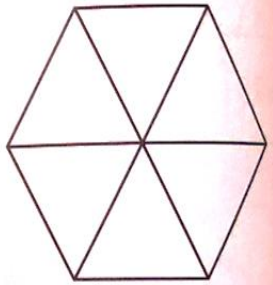
Amal



£40 = 10% 40 x 100 = £400

5)

This is 15% of the whole shape. How many triangles are in the whole shape?



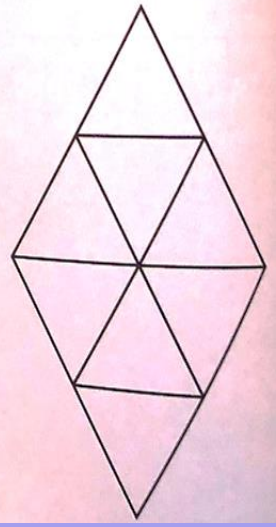
a) ☐ triangles = 15%

So, ☐ triangles = 5%

5% × ☐ = 100%

So, ☐ triangles × ☐ = ☐ triangles

☐ triangles = 100%



b) What fraction of the whole shape is this?

6)

DIVE DEEPER 2

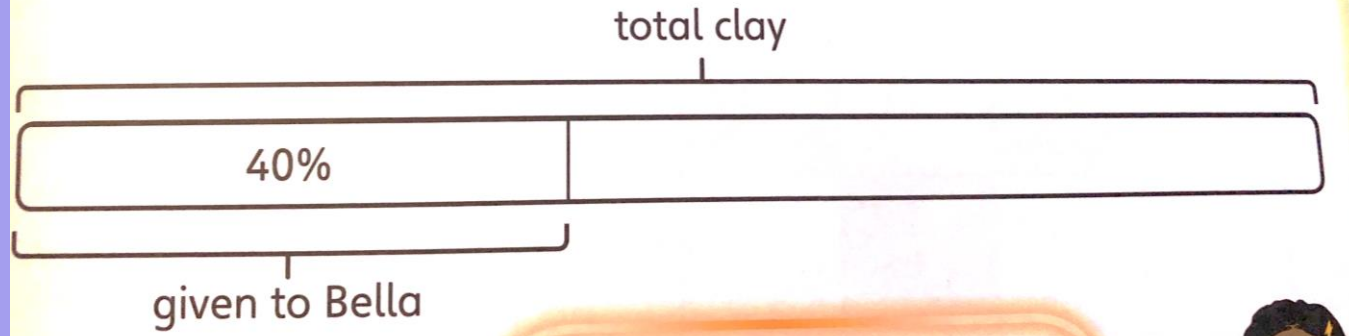
CHALLENGE

a) Danny has some clay.

He gives 40% to Bella. He then gives half of what remains to Isla.

Now Danny has 1,200 g of clay.

In grams, how much clay does Bella have?



I think he gives 50% of the total clay to Isla. Am I right?

b) Danny and Bella share out some more clay.

Bella has 45% of the clay and Danny has 1,200 g more than her.

In grams, how much clay is there in total?

5)

This is 15% of the whole shape. How many triangles are in the whole shape?

a) ☐ triangles = 15%

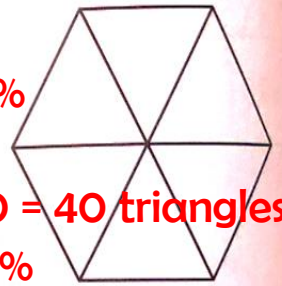
So, ☐ triangles = 5%

5% × ☐ = 100%

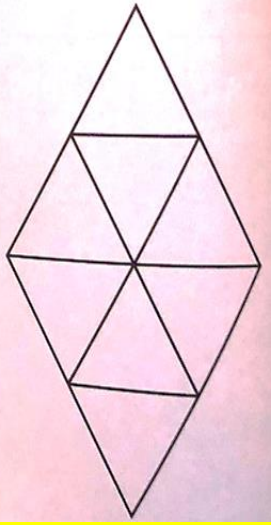
So, ☐ triangles × ☐ = ☐ triangles

☐ triangles = 100%

6 triangles =15%
So, 2 triangles = 5%
5% x 20 = 100%
So 2 triangles x 20 = 40 triangles
40 triangles = 100%



b) What fraction of the whole shape is this?



8 triangles
8/40 x 100 = 20%

6)

DIVE DEEPER 2

CHALLENGE

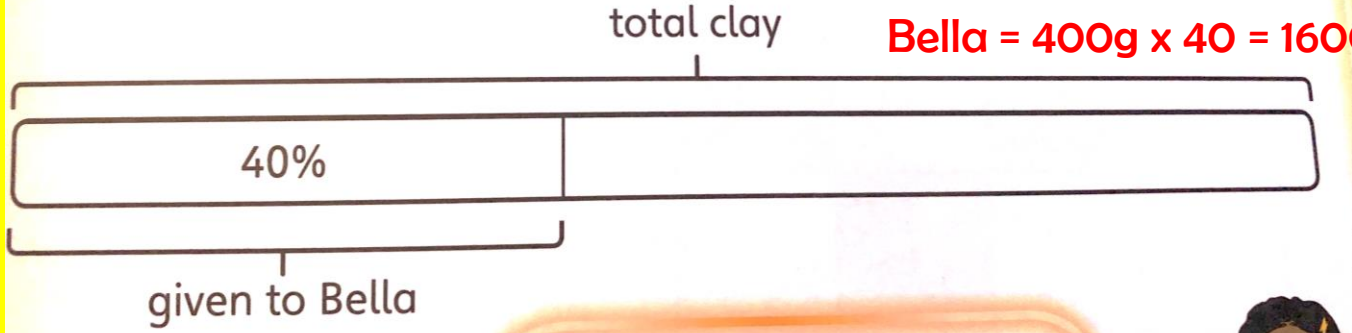
a) Danny has some clay.

He gives 40% to Bella. He then gives half of what remains to Isla.

Now Danny has 1,200 g of clay.

In grams, how much clay does Bella have?

40% to Bella
30% to Isla
30% left = 1200g
10% = 400g
Bella = 400g x 40 = 1600g



I think he gives 50% of the total clay to Isla. Am I right?

b) Danny and Bella share out some more clay.

Bella has 45% of the clay and Danny has 1,200 g more than her.

In grams, how much clay is there in total?

Bella = 45%
Danny = 55%
10% = 1200g = 1.2kg
100% = 12,000g = 12kg

DIVE DEEPER 3

a)

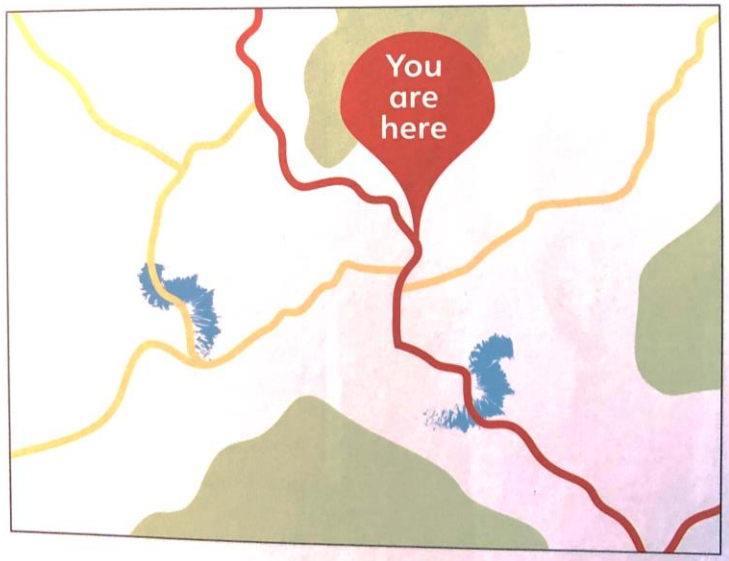
Guess my number.

Is it 30?

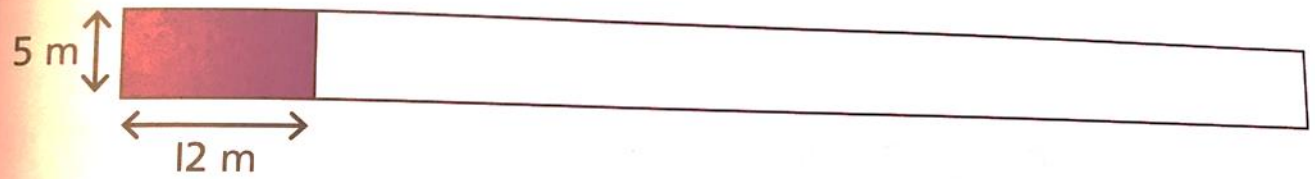
No, but that is exactly 15% of my number.

b

Jen has completed 30% of her 120 mile journey. How far has she travelled?



c) 15% of the rectangle is shaded.

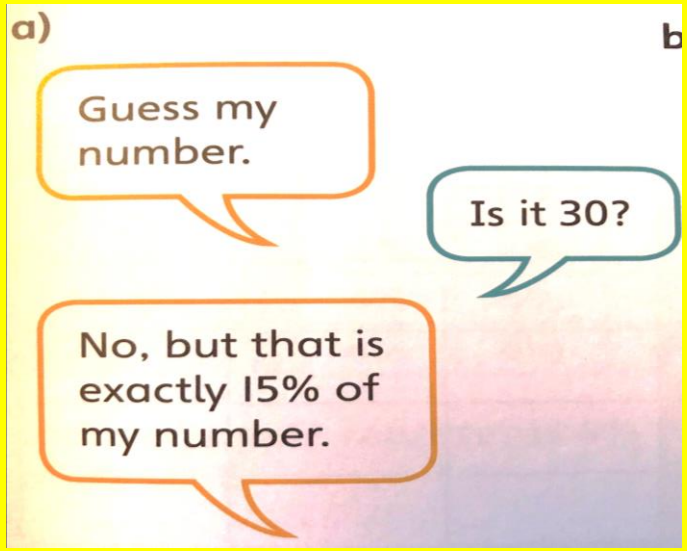


What is the area of the whole rectangle?

5 m + 12 m = 17 m, so 15% of the rectangle must be 17 m. Now I just need to work out the whole.

I think I need to multiply to find the area. So, to find 15% of the rectangle, first I need to work out 5 m × 12 m.

DIVE DEEPER 3

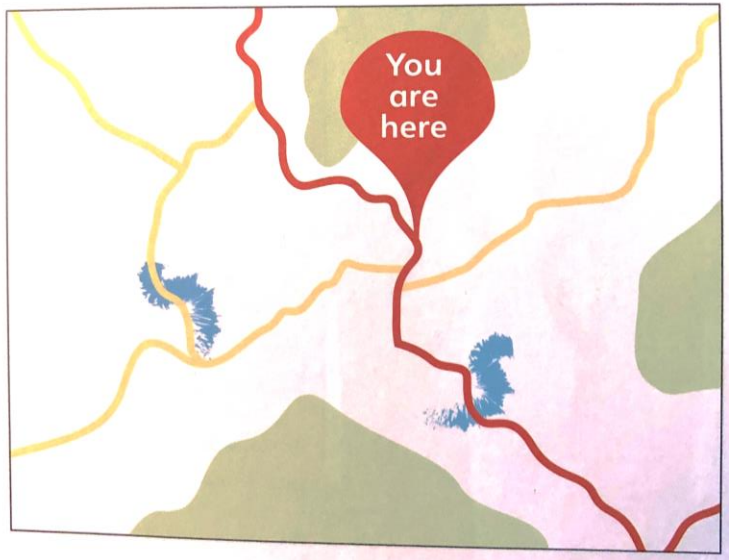


15% = 30
10% = 20
100% = 200

5 x 12 = 60m2 = 15%
10% = 40m2
100% = 400m2

40 miles

Jen has completed 30% of her 120 mile journey. How far has she travelled?



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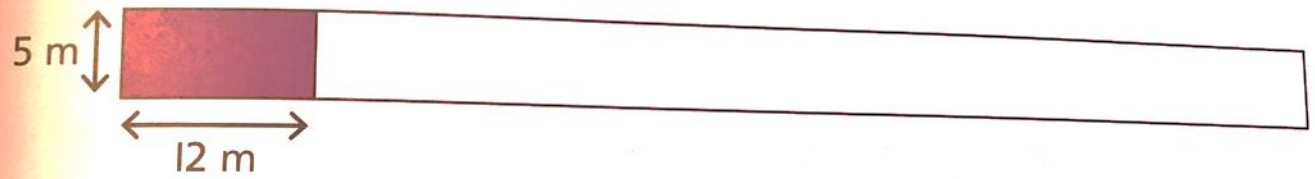

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