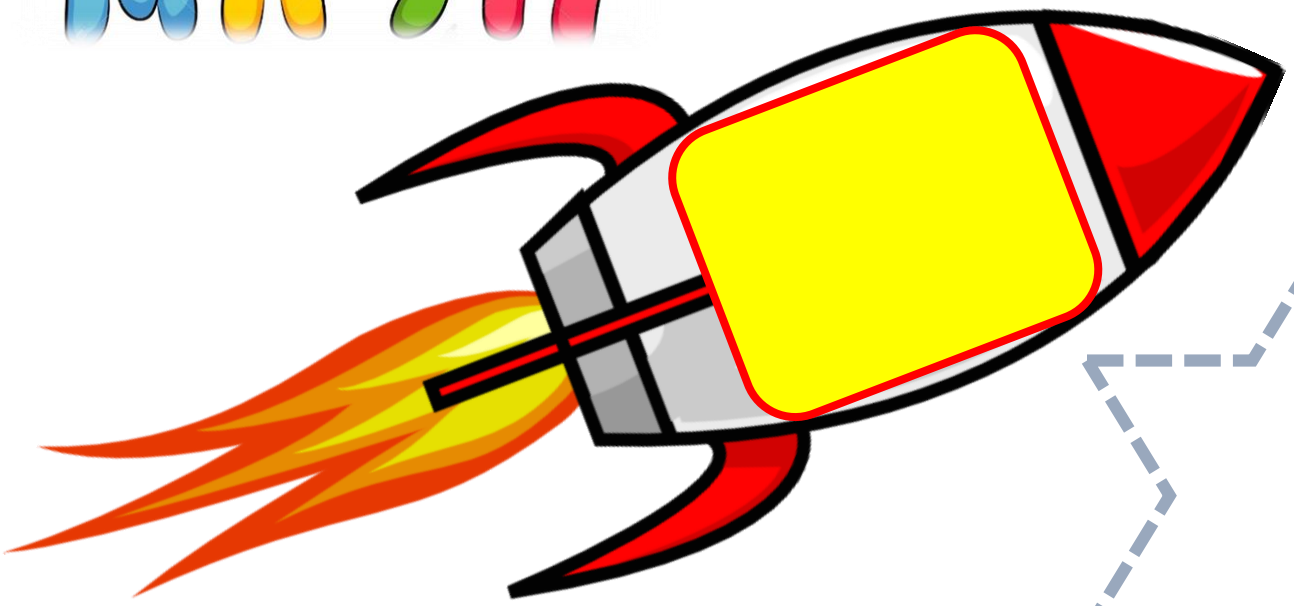


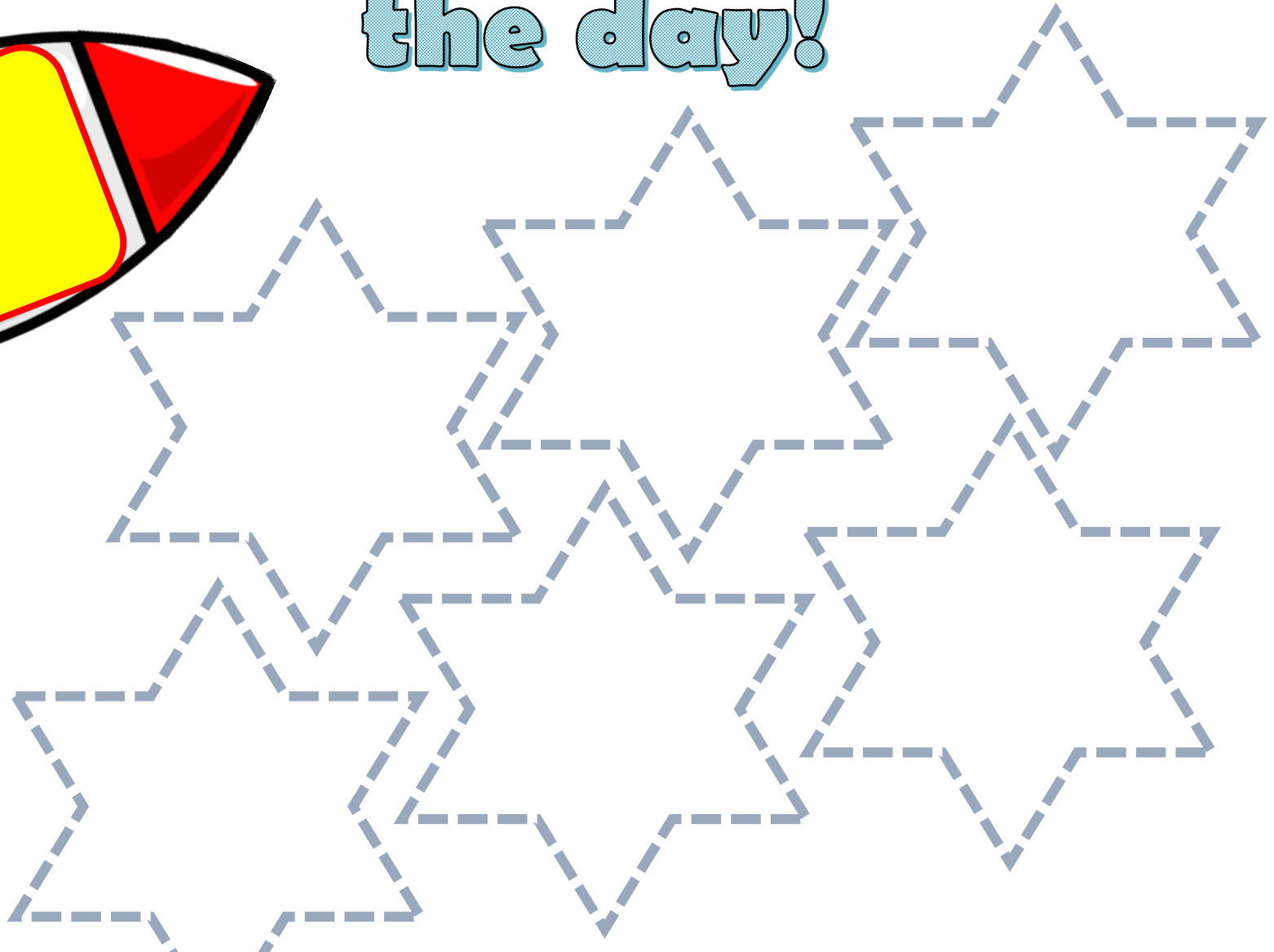


Mathematician of the day!





NAILED IT!
✓

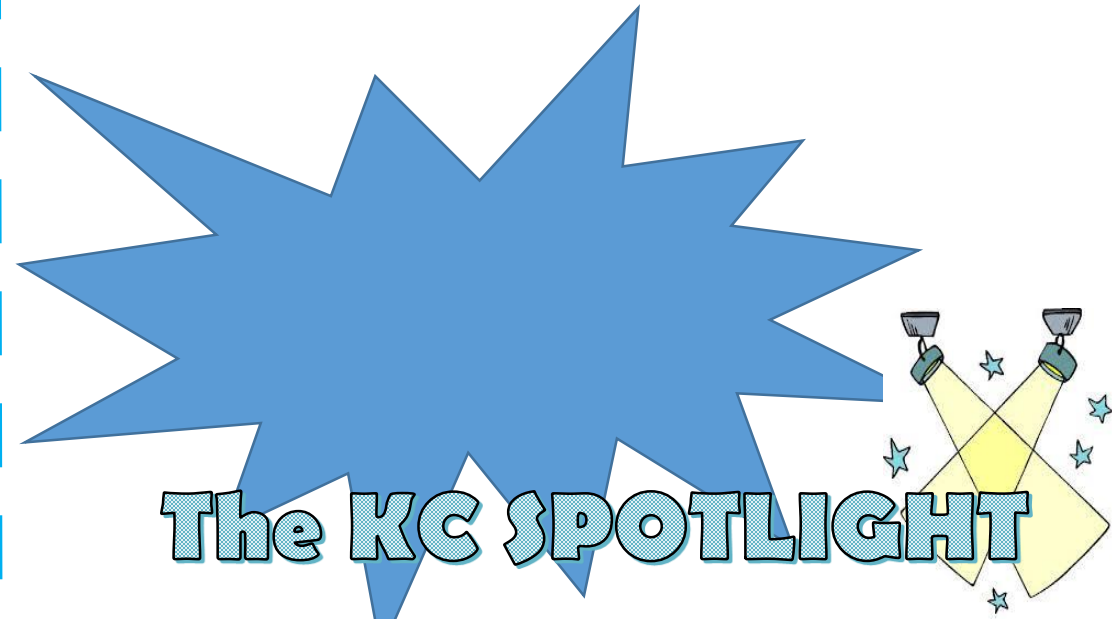
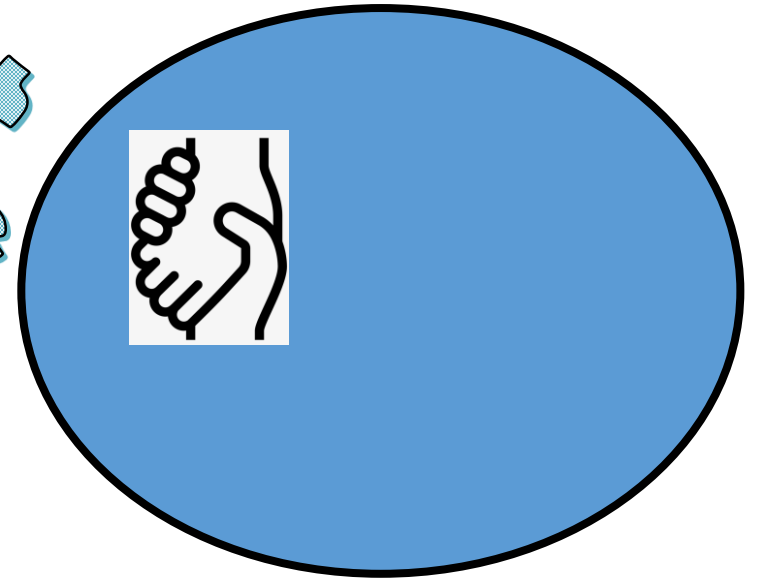


Presentation watch...



Non-negotiables

Silky's Circle



The KC SPOTLIGHT

RECALL

12 Write 0.16 as a fraction

1 mark

15 Circle **three** numbers that add up to 1

$\frac{1}{4}$ 0.5 10% $\frac{7}{10}$ 15% 0.2

1 mark

22 At the sweet factory, 3600 sweets are made each hour. $\frac{5}{9}$ of the sweets are lollipops. 20% of the sweets are gummy bears and the rest is chocolate bars. How many chocolate bars are manufactured each hour?

1 mark

25.01.22

L.O. - TO FIND A PERCENTAGE OF AN AMOUNT.

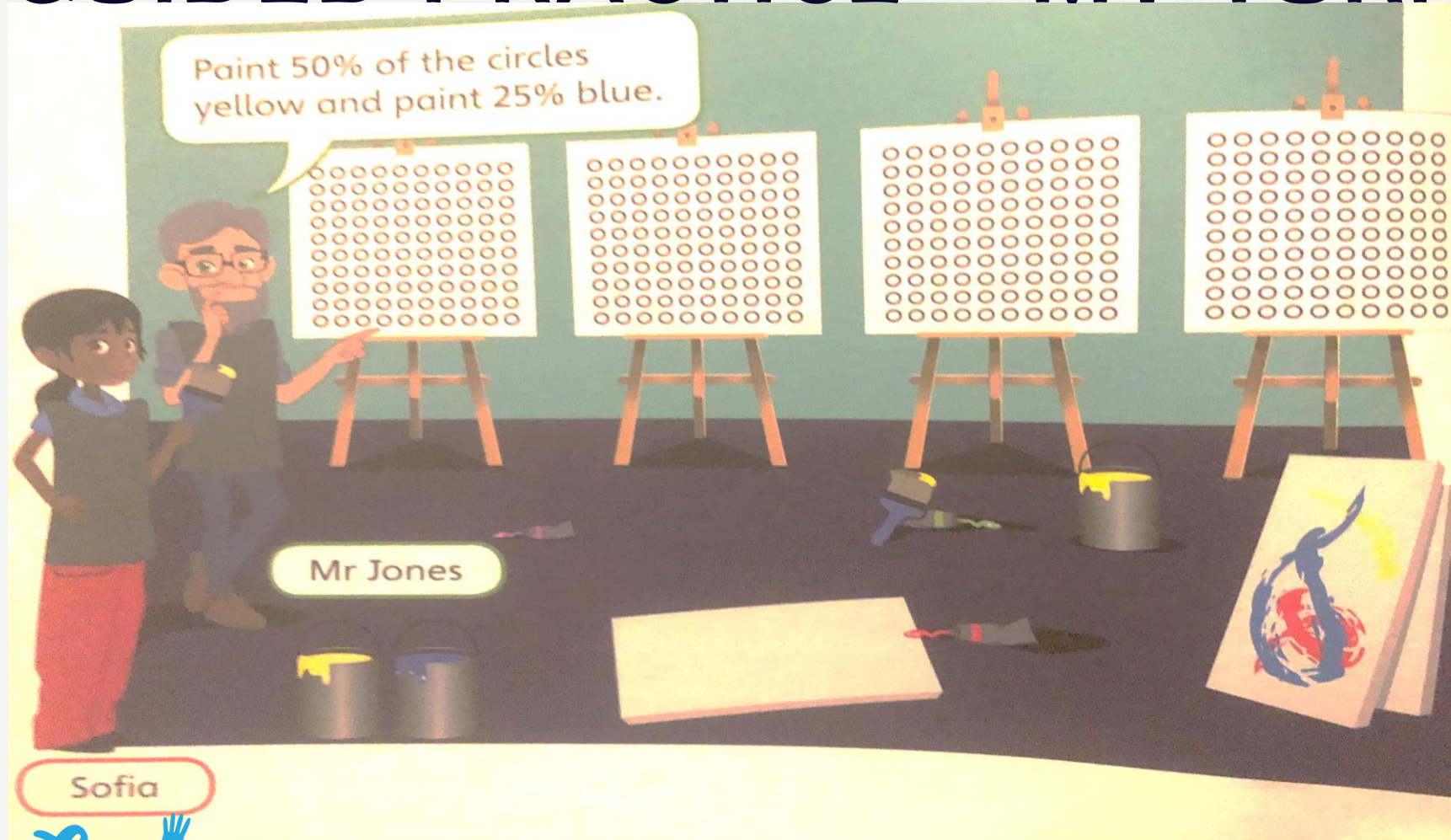
SOME WILL EVEN: Solve a variety of problems involving percentages.

SOME WILL: Calculate % reductions using subtraction.

MOST WILL: Use understanding of FDP to help find 50%, 25% and 10%.

ALL WILL: Use bar model and percentage squares to calculate 50%, 25% and 10%.

GUIDED PRACTICE – MY TURN



- 1) How many circles should Sofia paint yellow?
- 2) Describe two different ways she could paint the blue circles.

50% =

25% =

10% =

help

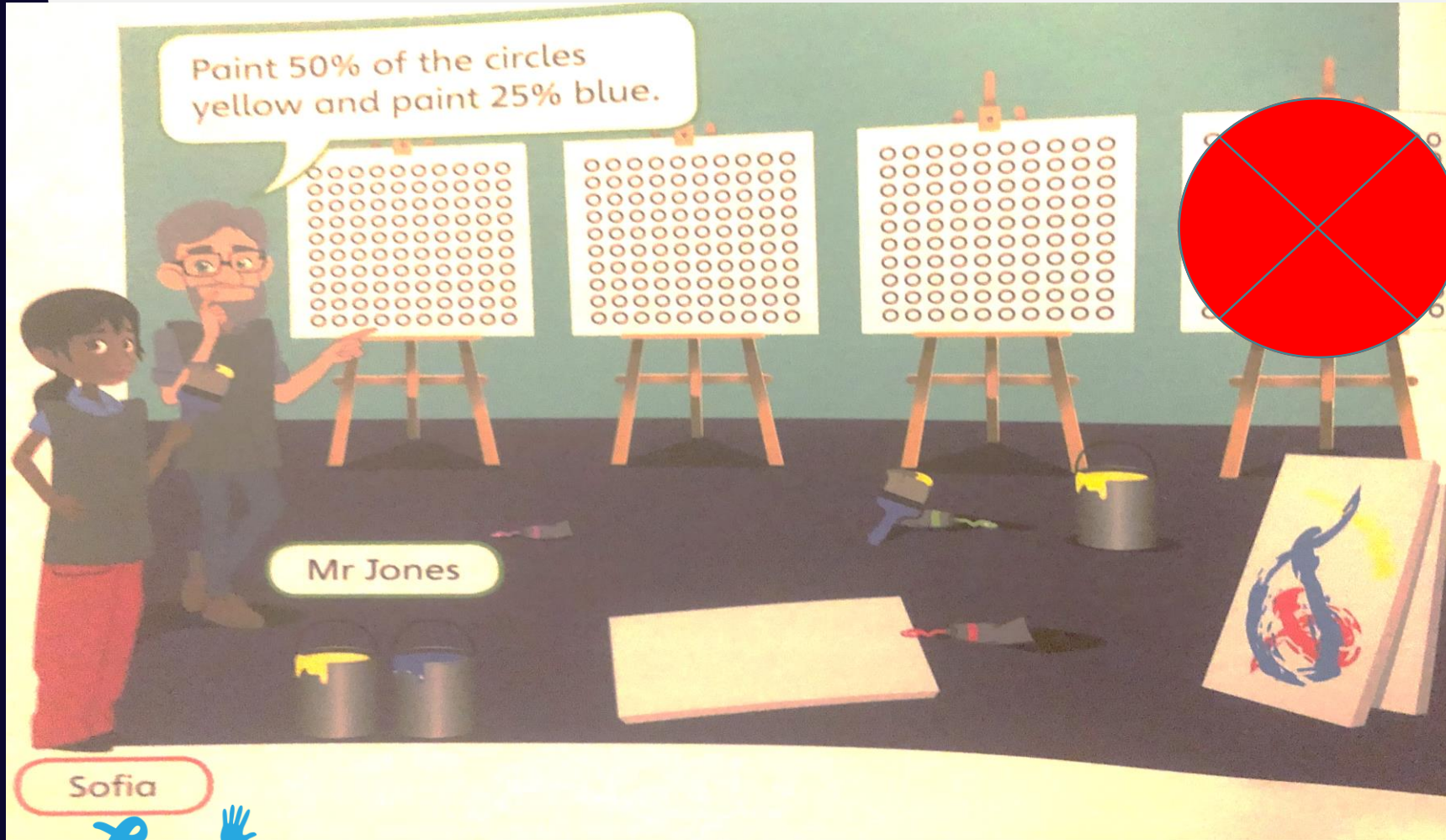
HINT: each canvas has 100 circles.

Look at how many circles in each and find 50% and 25% of that.



Sofia now wants to paint 10% of the circles red. How would she could she do this? Explain your method.

GUIDED PRACTICE – YOUR TURN



- 1) How many circles should Sofia paint yellow?
- 2) Describe two different ways she could paint the blue circles.

50% =

25% =

10% =

help

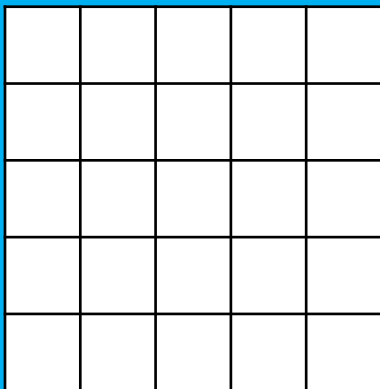


HINT: each canvas has 100 circles.

Look at how many circles in each and find 50% and 25% of that.

Sofia now wants to paint 10% of the circles red. How would she could she do this? Explain your method.

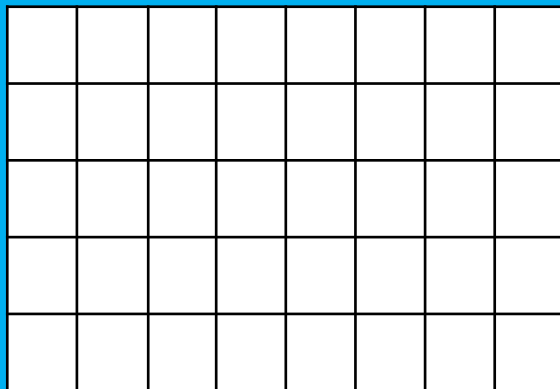
Intelligent Practice



50% of 20 =

25% of 20 =

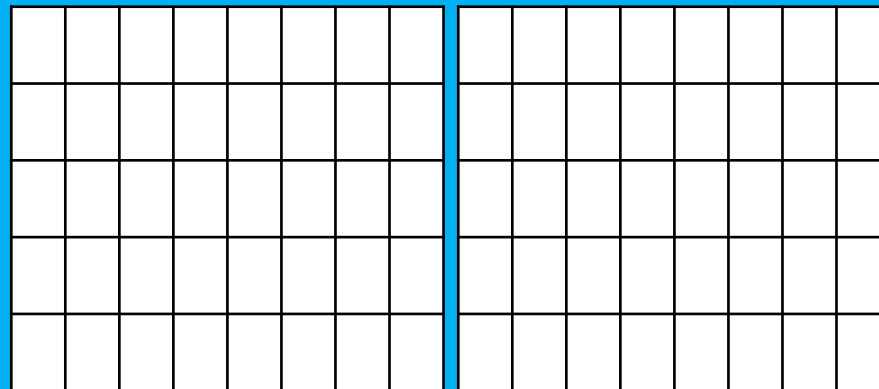
10% of 20 =



50% of 40 =

25% of 40 =

10% of 40 =



50% of 80 =

50% of 160 =

25% of 80 =

25% of 160 =

10% of 80 =

10% of 160 =



50% of 320 =

25% of 320 =

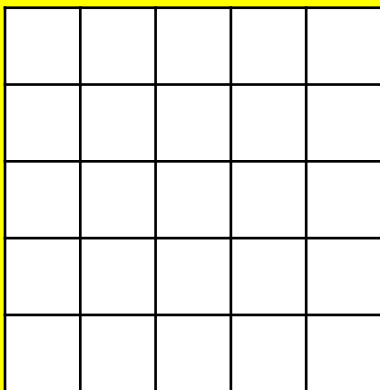
10% of 320 =

50% of 400 =

25% of 200 =

10% of 800 =

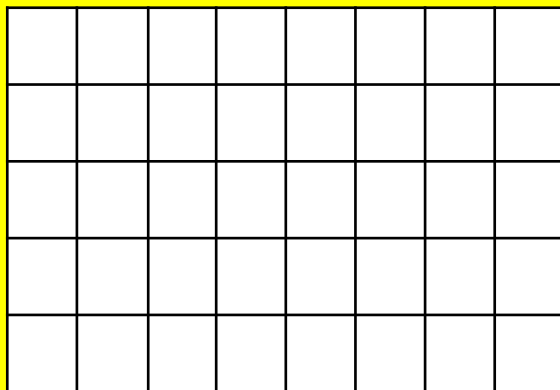
Intelligent Practice



$$50\% \text{ of } 20 = 10$$

$$25\% \text{ of } 20 = 5$$

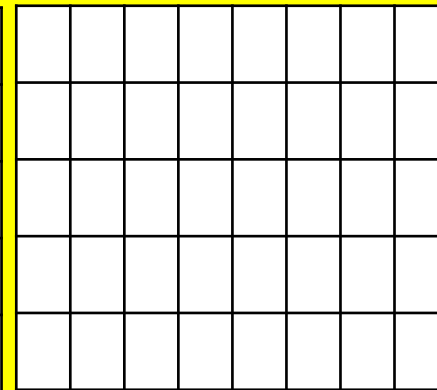
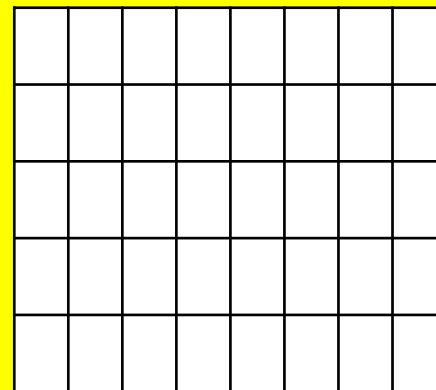
$$10\% \text{ of } 20 = 2$$



$$50\% \text{ of } 40 = 20$$

$$25\% \text{ of } 40 = 10$$

$$10\% \text{ of } 40 = 4$$



$$50\% \text{ of } 80 = 40$$

$$25\% \text{ of } 80 = 20$$

$$10\% \text{ of } 80 = 8$$

$$50\% \text{ of } 160 = 80$$

$$25\% \text{ of } 160 = 40$$

$$10\% \text{ of } 160 = 16$$



$$50\% \text{ of } 320 = 160$$

$$25\% \text{ of } 320 = 80$$

$$10\% \text{ of } 320 = 32$$

$$50\% \text{ of } 400 = 200$$

$$25\% \text{ of } 200 = 50$$

$$10\% \text{ of } 800 = 80$$



DIVE DEEPER 1

1)

Find the percentages.

$50\% \text{ of } 50 = \boxed{}$

$25\% \text{ of } 50 = \boxed{}$

$10\% \text{ of } 30 = \boxed{}$

$50\% \text{ of } 5 = \boxed{}$

$25\% \text{ of } 500 = \boxed{}$

$10\% \text{ of } \boxed{} = 30$

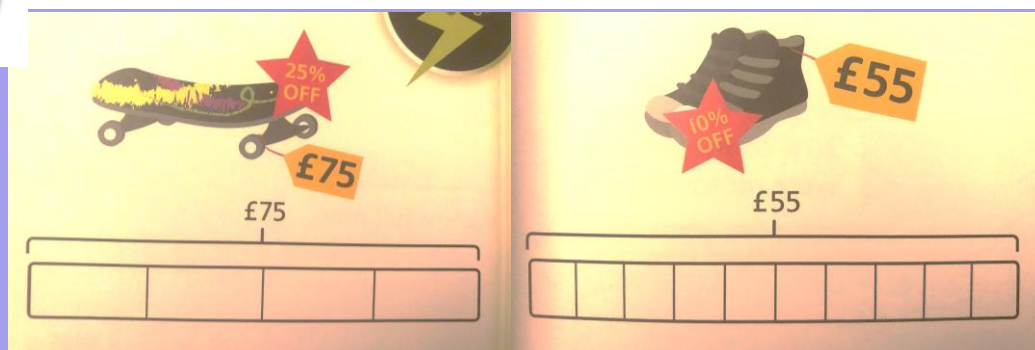
$50\% \text{ of } 0.5 = \boxed{}$

$25\% \text{ of } 1,000 = \boxed{}$

$10\% \text{ of } 3 = \boxed{}$

2)

Bella wants to buy a pair of trainers and a skateboard in the sale.



a) How much are the trainers reduced by? How much will they cost after being reduced?

b) How much is the skateboard reduced by? How much will it cost after being reduced?

c) Explain Bella's mistake:-

To find 10% I can divide by 10.
So, to find 25% I can divide by 25.

Bella





DIVE DEEPER 1



1)

Find the percentages.

$$50\% \text{ of } 50 = \boxed{25}$$

$$25\% \text{ of } 50 = \boxed{12.5}$$

$$10\% \text{ of } 30 = \boxed{3}$$

$$50\% \text{ of } 5 = \boxed{2.5}$$

$$25\% \text{ of } 500 = \boxed{125}$$

$$10\% \text{ of } \boxed{300} = 30$$

$$50\% \text{ of } 0.5 = \boxed{0.25}$$

$$25\% \text{ of } 1,000 = \boxed{250}$$

$$10\% \text{ of } 3 = \boxed{0.3}$$

2)

Bella wants to buy a pair of trainers and a skateboard in the sale.



£55



£75



a) How much are the trainers reduced by? How much will they cost after being reduced?

$$\text{£}5.50 = \text{£}49.50$$

b) How much is the skateboard reduced by? How much will it cost after being reduced?

$$\text{£}18.75 = \text{£}56.25$$

c) Explain Bella's mistake:-

To find 10% I can divide by 10.
So, to find 25% I can divide by 25.

Bella



3)

Calculate the amount of money taken off each item.

a)  

£24 

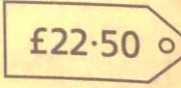
c)  

£25 

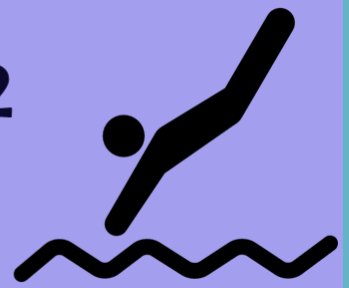
b)  

£30 

d)  

£22.50 

DIVE DEEPER 2



4)

Richard has £40. He spends 50% on Saturday. On Sunday he spends 10% of what is left. On Monday he gives 25% of the remaining amount to charity. He then spends £5.75 at the cinema. How much money does Richard have left?



During a sale, prices were reduced by 20%. If Jack paid £132 for a new phone, what was the price of the phone before the sale?

1 mark

3)

Calculate the amount of money taken off each item.



$$\text{£}6.00 = \text{£}18.00$$



$$\text{£}2.50 = \text{£}22.50$$



$$\text{£}7.50 = \text{£}22.50$$



$$\text{£}11.25 = \text{£}11.25$$

DIVE DEEPER 2



$$\text{SAT } \text{£}40 - \text{£}20 (50\%) = \text{£}20$$

$$\text{SUN } \text{£}20 - \text{£}2 (10\%) = \text{£}18$$

$$\text{MON } \text{£}18 - \text{£}4.50 (25\%) = \text{£}13.50$$

$$\text{£}13.50 - \text{£}5.75 = \text{£}7.75 \text{ left}$$

4)

Richard has £40. He spends 50% on Saturday. On Sunday he spends 10% of what is left. On Monday he gives 25% of the remaining amount to charity. He then spends £5.75 at the cinema. How much money does Richard have left?



During a sale, prices were reduced by 20%. If Jack paid £132 for a new phone, what was the price of the phone before the sale?

$$\text{£}132 = 80\%$$

$$\text{£}33 = 20\% \rightarrow$$

$$\text{£}165$$



1 mark

