

Tuesday 1st April
T.B.A.T. use in, im, ir, and il prefixes.

A task setting PowerPoint Pack about adding prefixes

The in, im, il and ir prefixes

This group of prefixes all mean not or the opposite of.

The prefix that is used depends on the first letter of the root word (original word).

Here are the golden rules for using this group of prefixes.

Prefix	Use it when	Example
ir	The roots words begins with 'r'.	irreversible
im	The root word begins with 'm' or 'p'.	immature impossible
il	The root word begins with 'l'.	illegal
in	The root word begins with any other letter.	incapable inefficient inadequate



Meaning: not or the opposite of.

Examples: inappropriate, indefensible, inaudible.



Jeremy was told that his clothes were inappropriate for his job at the building site.



Meaning: not or the opposite of.

Examples: immovable, impartial, imperfect.



This shipwreck is immovable so it sits and rusts on the beach.



Meaning: not or the opposite of.

Examples: illegal, illogical, illegible.



Toby's handwriting was illegible because he was rushing his work.

ir

Meaning: not or the opposite of.

Examples: irreparable, irrespective, irresistible.



I will have to buy another skateboard because mine is irreparable.

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On our holiday, we saw a fantastic magician perform an incredible

_____.

His plan for the upcoming bingo night was _____
and didn't make sense.

Our neighbours are having their windows refitted and it is causing
_____ noise.

When my little brother is having a tantrum, he is very _____
and nothing can calm him down.

Mrs Carter not only wants us to write a three-page story but wants us to
_____ it with pictures too.

After today, our train tickets will be _____ and won't
work at the turnstiles.

My uncle is a jeweller and he says that lots of diamonds in the world
are actually _____.

In maths, we have been learning about _____
shapes and their properties.

illustrate

incessant

invalid

imperfect

illusion

irrational

impractical

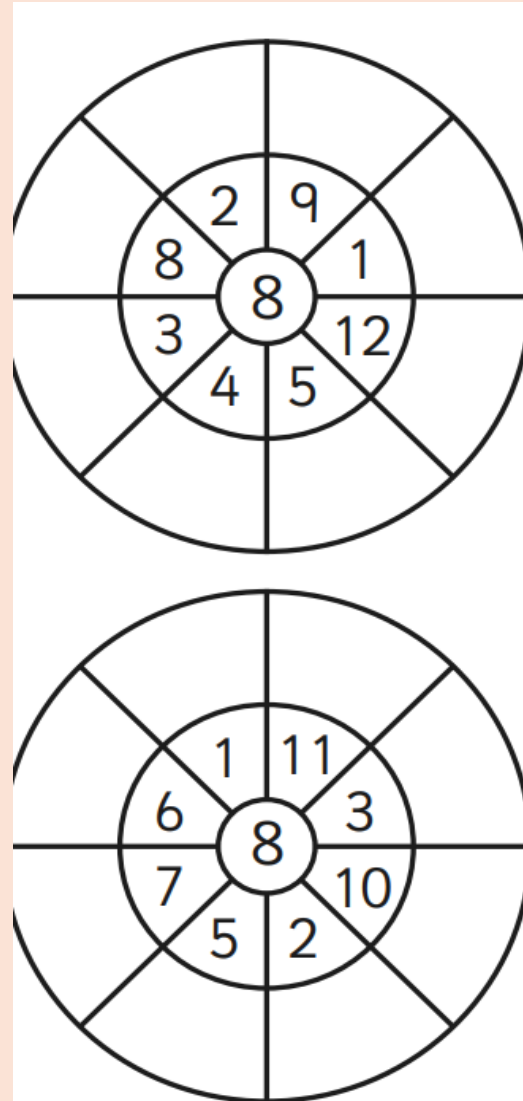
irregular

01.04.25

TBAT: compare the area of rectilinear shapes, including rectangles.



Counting stick: x8



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TBAT: compare the area of rectilinear shapes, including rectangles.

3 in 3

1. $78 \div 10 =$

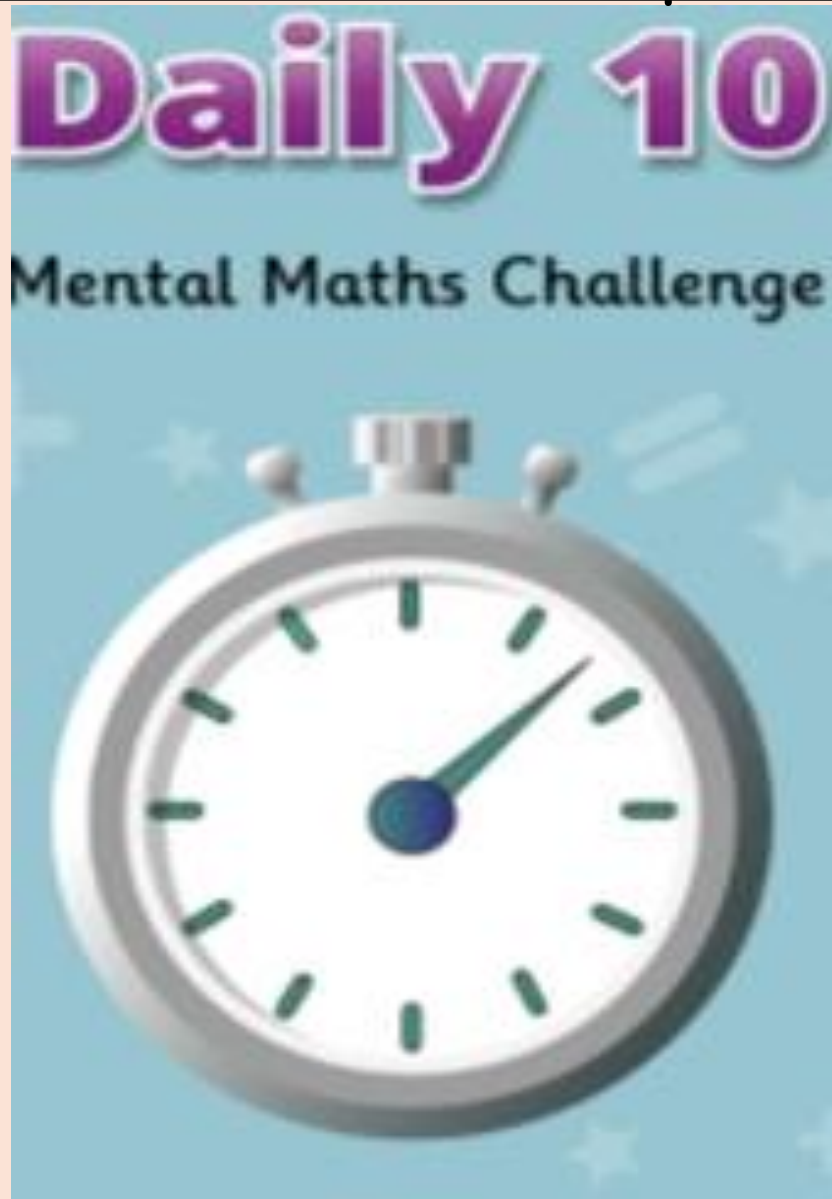
2. $40/100 = 0.\underline{\hspace{1cm}}$

3. $1 - 2/7 =$

Ch - Dan has £1.20, he spends $3/6$ of his money. How much does he have left?

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TBAT: compare the area of rectilinear shapes, including rectangles.



Remember It

Use $<$, $>$ or $=$ to compare these numbers and calculations:

$$17 < 26$$

$$1800 > 1080$$

$$25 + 32 > 100 - 44$$

$$3 \times 4 = 3 + 3 + 3 + 3$$

$$20 \times 4 < 15 \times 6$$

$$250 - 40 < 25 \times 9$$

Extra Challenge

Write a range of different calculations which will make this true:

$$55 + 62 > \boxed{}$$

$= 117$

Try and use different maths symbols for each of your calculations eg, \div , \times , $-$, $+$

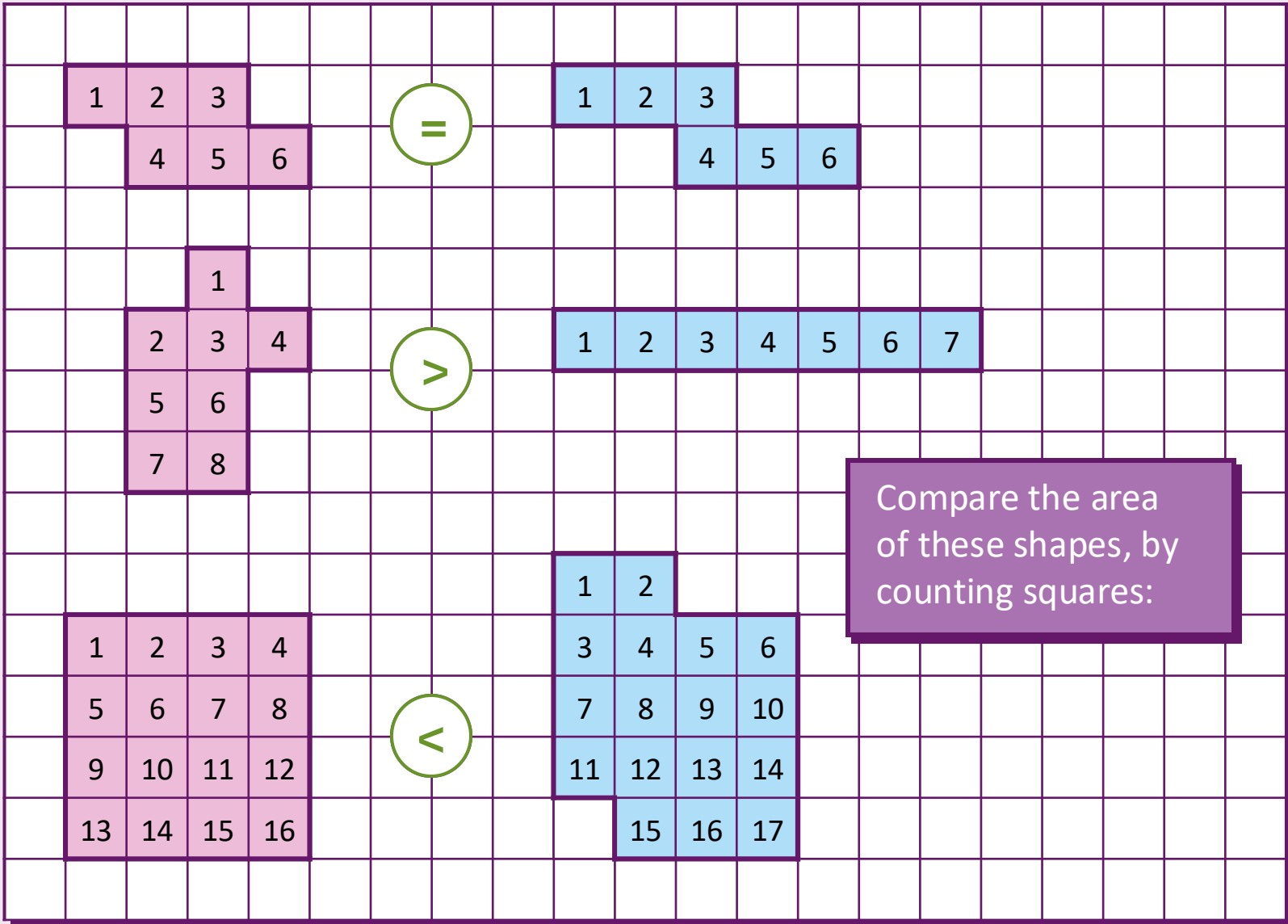
Many answers are possible, such as:

$$25 \times 4$$

$$345 \div 3$$

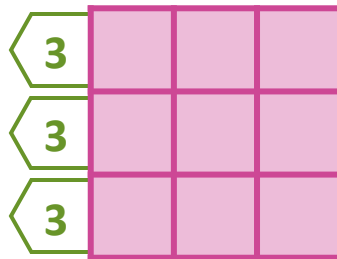
$$250 - 136$$

Compare by Counting Squares

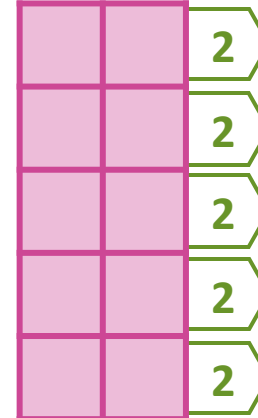
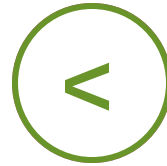


Compare by Using Multiples

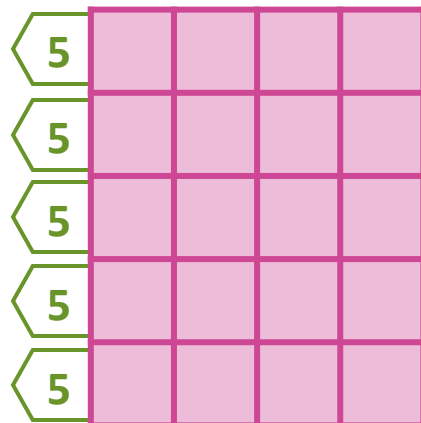
This time, use multiples to compare the area of these rectangles:



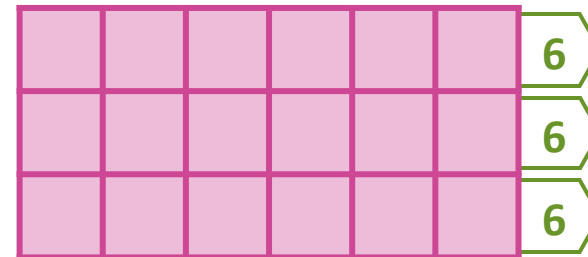
$$3 \times 3 = 9$$



$$2 \times 5 = 10$$



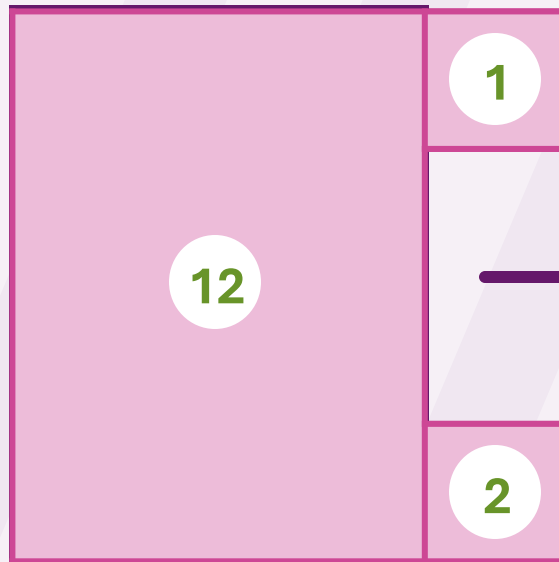
$$5 \times 4 = 20$$



$$6 \times 3 = 18$$

Using Rectangles Within Shapes

In this rectilinear shape, we could look for a rectangle, then add on any extra squares:



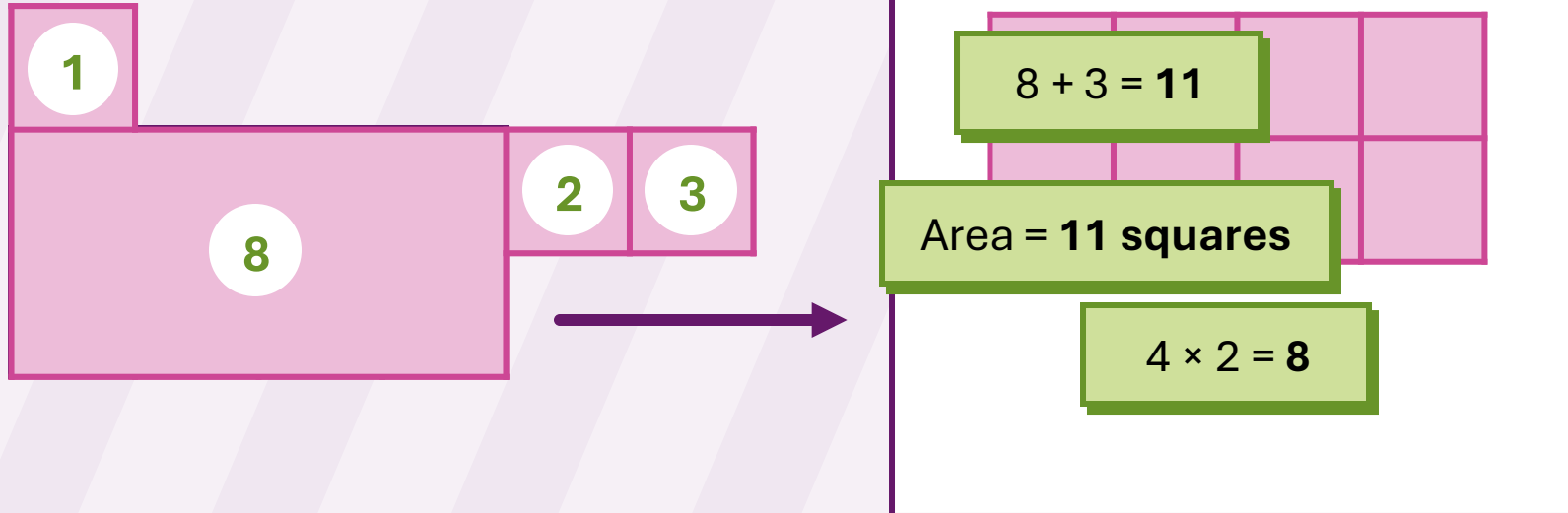
$$12 + 2 = 14$$

Area = 14 squares

$$3 \times 4 = 12$$

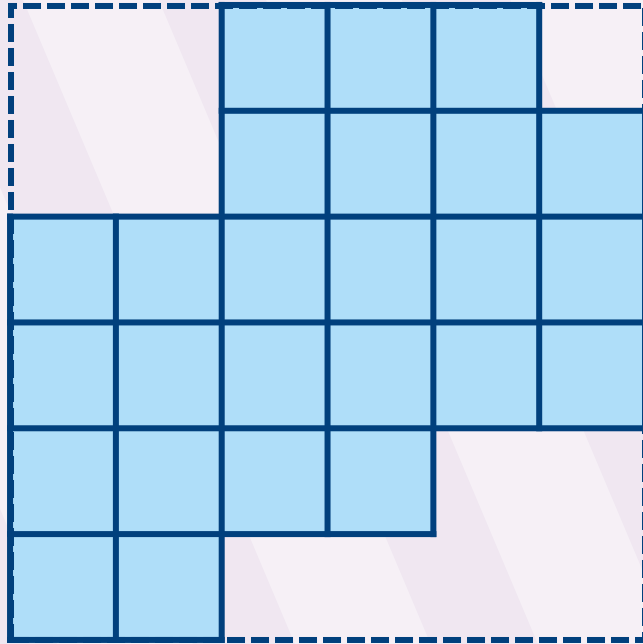
Using Rectangles Within Shapes

Look for a rectangle in this shape and add on the extra squares to find the area:

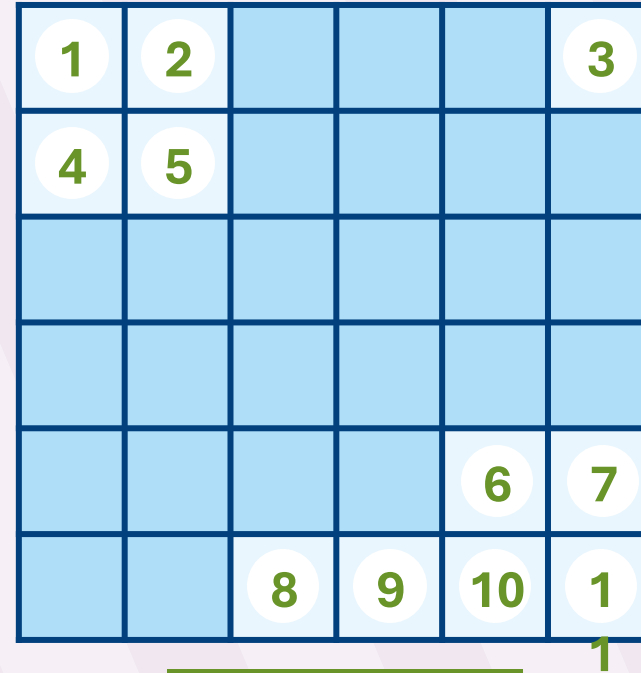


Using Rectangles Within Shapes

Here we could extend the shape to make a rectangle and subtract the squares which aren't included:



$$6 \times 6 = 36 \text{ squares}$$

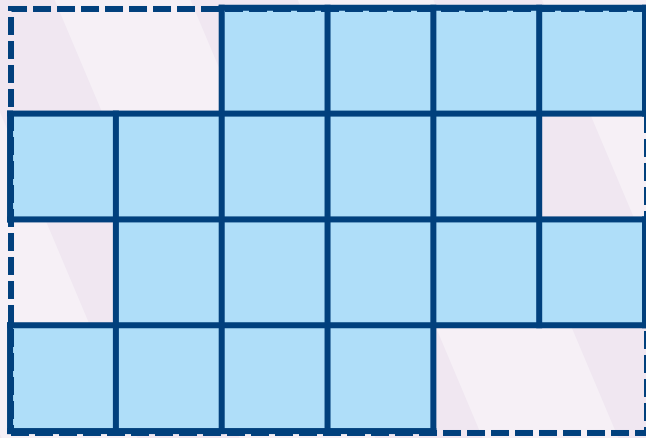


$$36 - 11 = 25$$

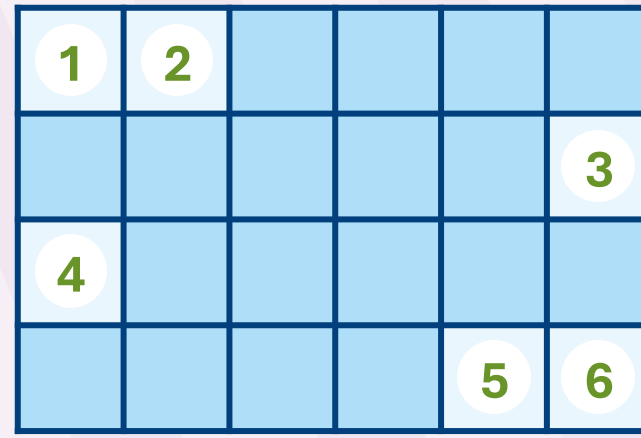
$$\text{Area} = 25 \text{ squares}$$

Using Rectangles Within Shapes

Extend the shape to make a rectangle and subtract the squares which aren't included, to find the area:



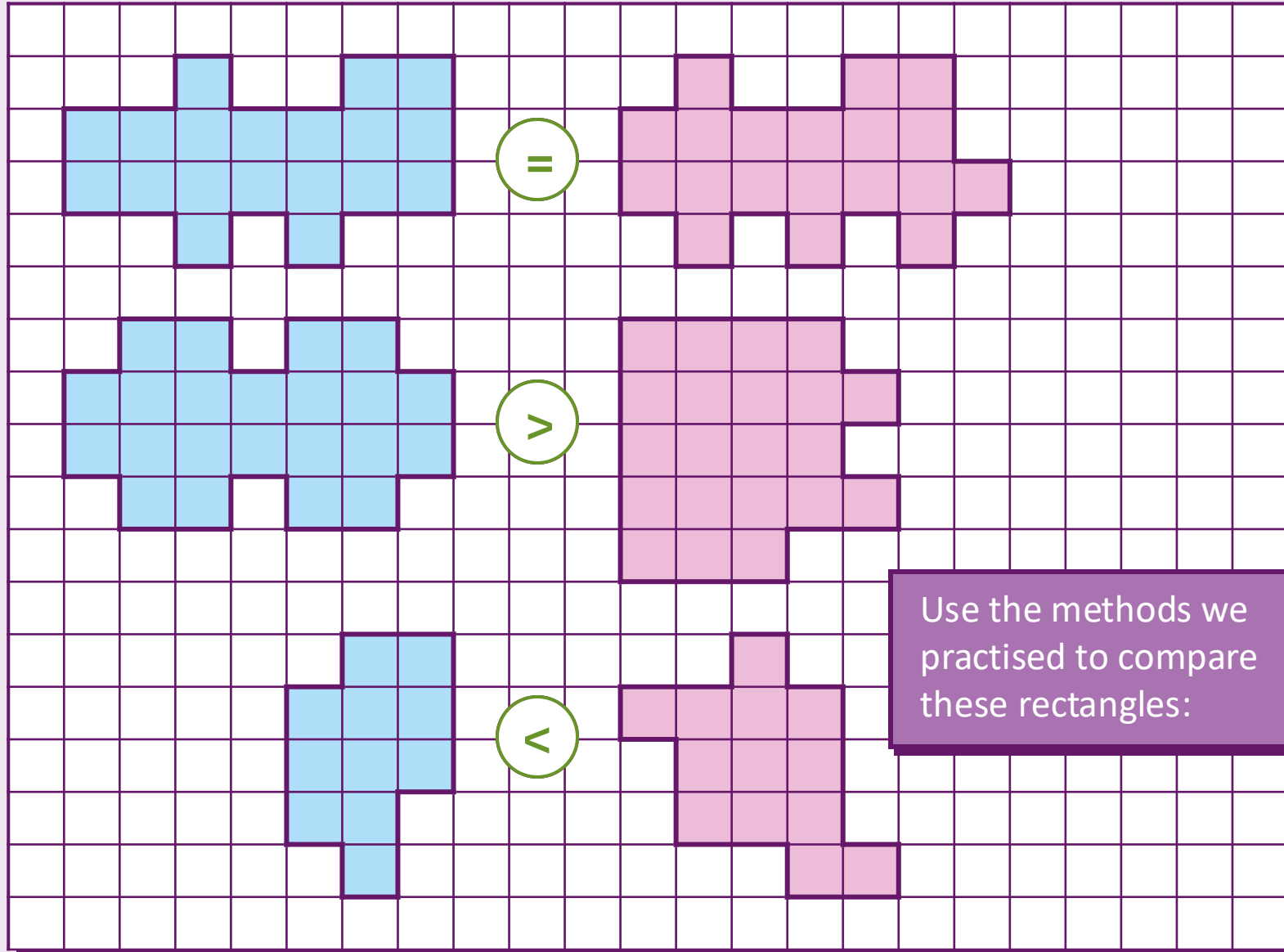
$$6 \times 4 = 24 \text{ squares}$$



$$24 - 6 = 18$$

$$\text{Area} = 18 \text{ squares}$$

Comparing Rectilinear Shapes


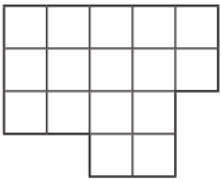
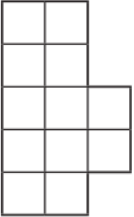


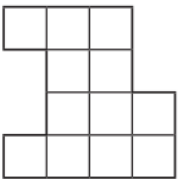



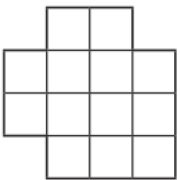
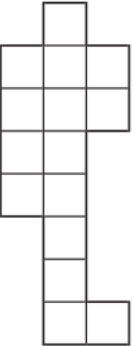



Use the methods we practised to compare these rectangles:

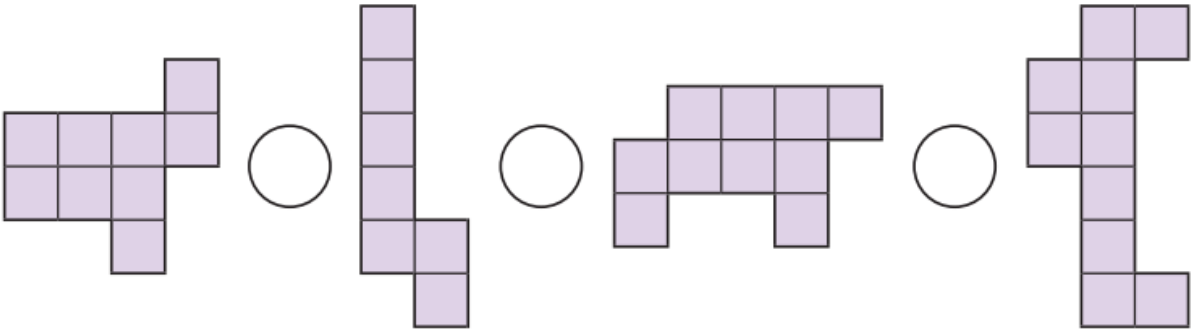
01.04.25

TBAT: compare the area of rectilinear shapes, including rectangles.

Independent

		○		
		○		
		○		

Count squares to compare the areas.

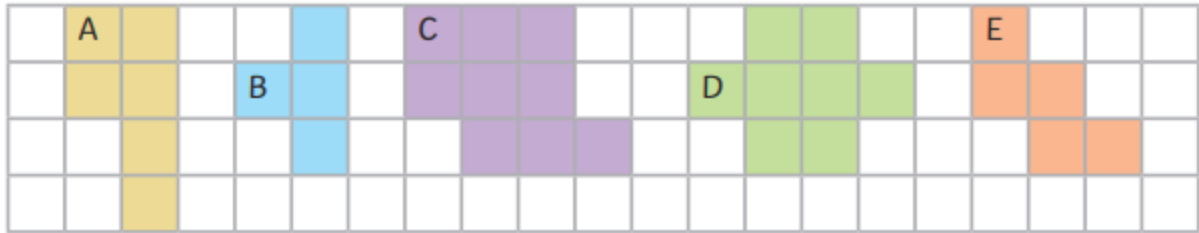


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TBAT: compare the area of rectilinear shapes, including rectangles.

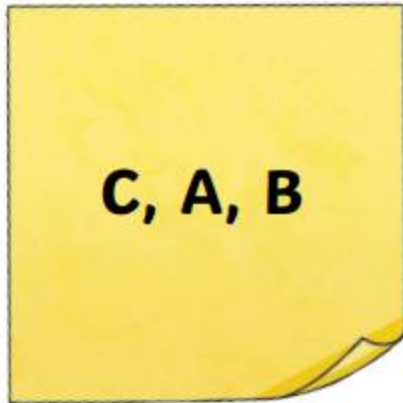
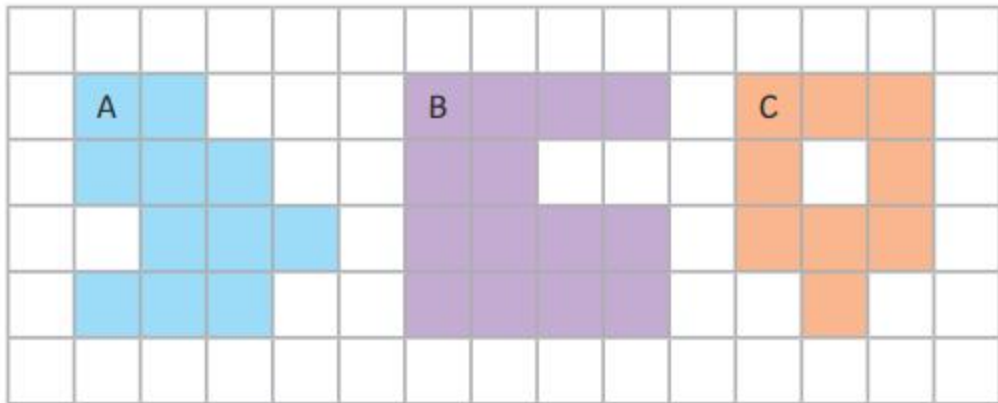
Challenge

Order these shapes from the shape with the largest area to the shape with the smallest area.



Mastery

Gavin has been asked to order these rectilinear shapes from the one with the greatest area to the one with the smallest area. His teacher has marked his answer as wrong and he is confused. Can you spot and explain the mistake he has made?

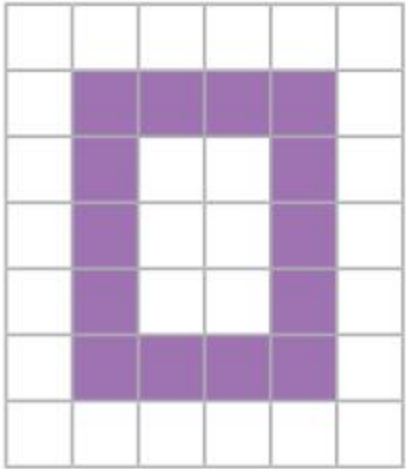


01.04.25

TBAT: compare the area of rectilinear shapes, including rectangles.

Mastery with greater depth

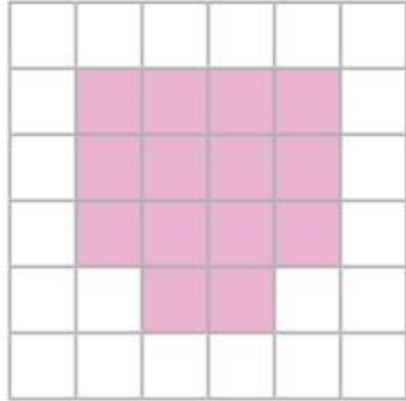
Kylie and Marcel are having a disagreement over whose shape has the greater area. Who do you think is correct? Explain your reasoning.



My shape has the greater area because it is taller than Marcel's.



My shape has the greater area because it is all filled in and does not have gaps in the middle like Kylie's.



Tuesday 1st April

T.B.A.T. organise writing into paragraphs.

1. On which day did they hear from another passenger ship?

2. This text is called Diary of a Voyager. Based on what you've read, what would be an appropriate new title for this text?

3. Compare how the person writing the diary is feeling on day 200 to how they are feeling on day 290.

2 Day 200


13 Today marks our 200th day on this ship. That's 200 days
23 of seeing nothing but emptiness. It also means 200 days
33 of the captain saying, "We'll find somewhere to settle soon
34 enough."

36 Day 215

47 We have heard from one of the other passenger ships that
59 left Earth at around the same time that we did. Although it
71 was nice to hear from them, I wish that they had brought
76 news of a new planet.

78 Day 290

88 The captain has announced that we may have found a
99 suitable planet to land on. The scout ship has been sent
110 out to investigate. I've got my fingers and toes crossed for
112 good news.



Tuesday 1st April

T.B.A.T. organise writing into paragraphs.

What is a feature?

What is non-chronological report?

Why is a fact file a non-chronological report?

Writing a non-chronological report - English - Learning with BBC Bitesize



Learn how to write a clear and informative report.

Tuesday 1st April

T.B.A.T. organise writing into paragraphs.

Look at the facts you have gathered and decided what sub-headings you could use to group the information.

Tuesday 1st April

T.B.A.T. organise writing into paragraphs.



Features of a non-
chronological report (fact file)

Tuesday 1st April

TBAT: design a project that includes repetition.

Define a count-controlled loop.

Define an infinite loop.

Tuesday 1st April

TBAT: design a project that includes repetition.

Play the 'Bat Catching' game (ncce.io/46bat), and then look inside at the code, looking closely at the loops.

Answer these questions on your whiteboards:

- Is there repetition in the game?
- If yes, what is repeated, and what type of repetition is it?
- Do you think the code for all the bat sprites is the same? Why, or Why not?

Task: Make a game based on the same idea as the Bat catching game.

Your sprites should disappear and play a sound when clicked on, and then reappear.

Planning a game based on Bat catching — artwork

Look at the sprites and backgrounds available in Scratch.

- What could your project look like?
- How could you use sprites?
- How could you use backdrops for the stage?



Planning — what will the algorithm look like?

- How do you want your game to start?
- How do you want the sprites to move?
- What else could the sprites do?
- How will their actions be repeated?



Design your game

1. Choose your sprites and background.
2. Plan an algorithm for one sprite.
3. Decide whether the algorithm will be the same or different for the other sprites.

Use your whiteboard to plan your game.

Game design example:

Sprite name	Sprite 1: Bat 1
How will the sprite move?	Randomly
Will there be any sounds?	Owl sound when clicked
Type of repetition used (✓)	<input checked="" type="checkbox"/> Infinite (forever) <input type="checkbox"/> Count-controlled
Write the algorithm for the sprite	Repeatedly <ul style="list-style-type: none"> • Make it invisible • Move somewhere random on the screen and wait for 1 second • Make it visible and wait for 1 second
Which backdrops will you use?	Spooky forest
How will the game end?	When all the bats have been caught

Plan an algorithm for your game

Some of these terms might help you.

Rotate ___ degrees clockwise	Start playing the sound _____	and wait for ___ seconds
Rotate ___ degrees anti-clockwise	When you start the program	Do this ___ times
Go to a random place on the screen	Make it invisible Make it visible	Repeatedly