



## THE 2022 YOUNG MATHEMATICAL STORY AUTHOR (YMSA) COMPETITION

THE STUART J. MURPHY AWARD  
(THE 8-11 YEARS OLD CATEGORY)

### LONGLISTED

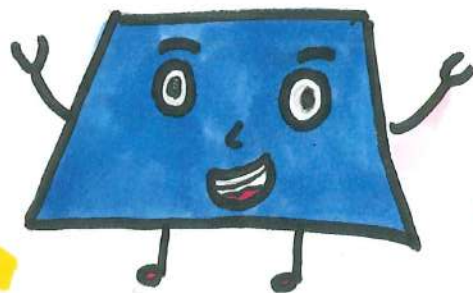
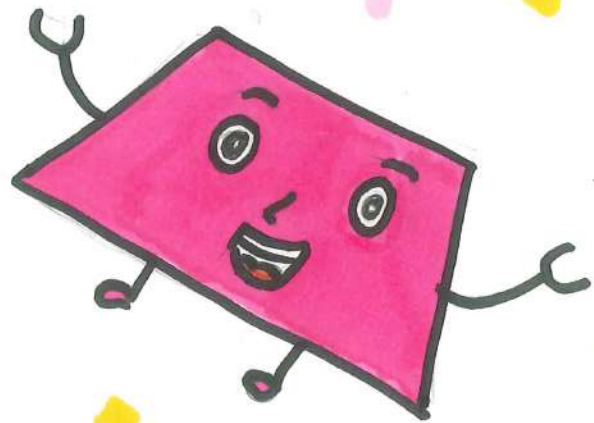
‘The Trapezium Kingdom’ by Xinyi Chen (10 years old)  
at the International School of Paphos (Cyprus)

You can read the author’s inspiration for the story and the judges’ comments  
on:

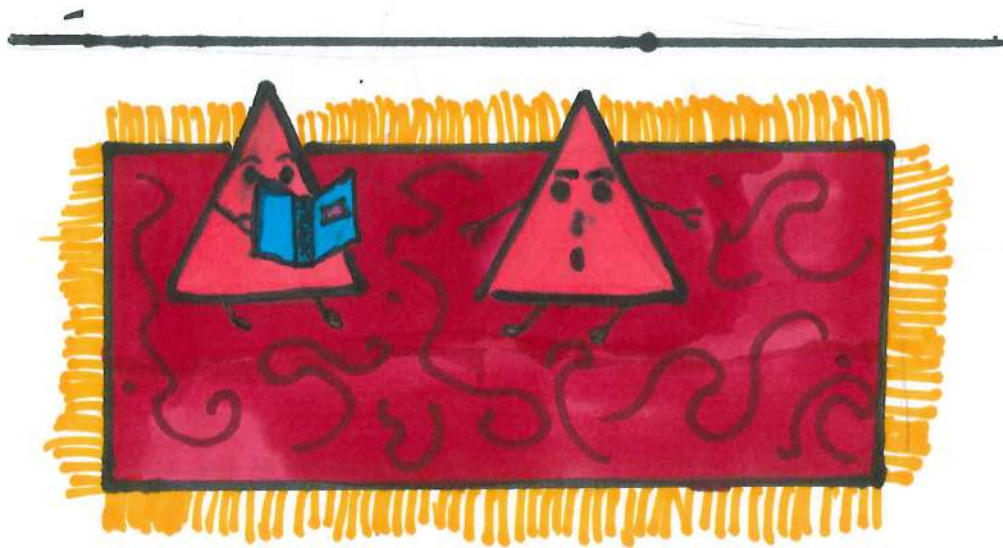
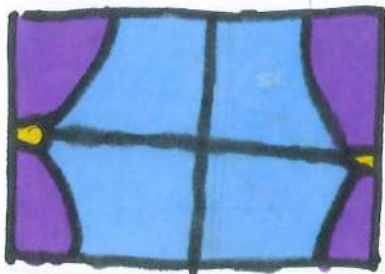
[www.mathsthroughstories.org/ymsa2022](http://www.mathsthroughstories.org/ymsa2022)

#YMSAMaths

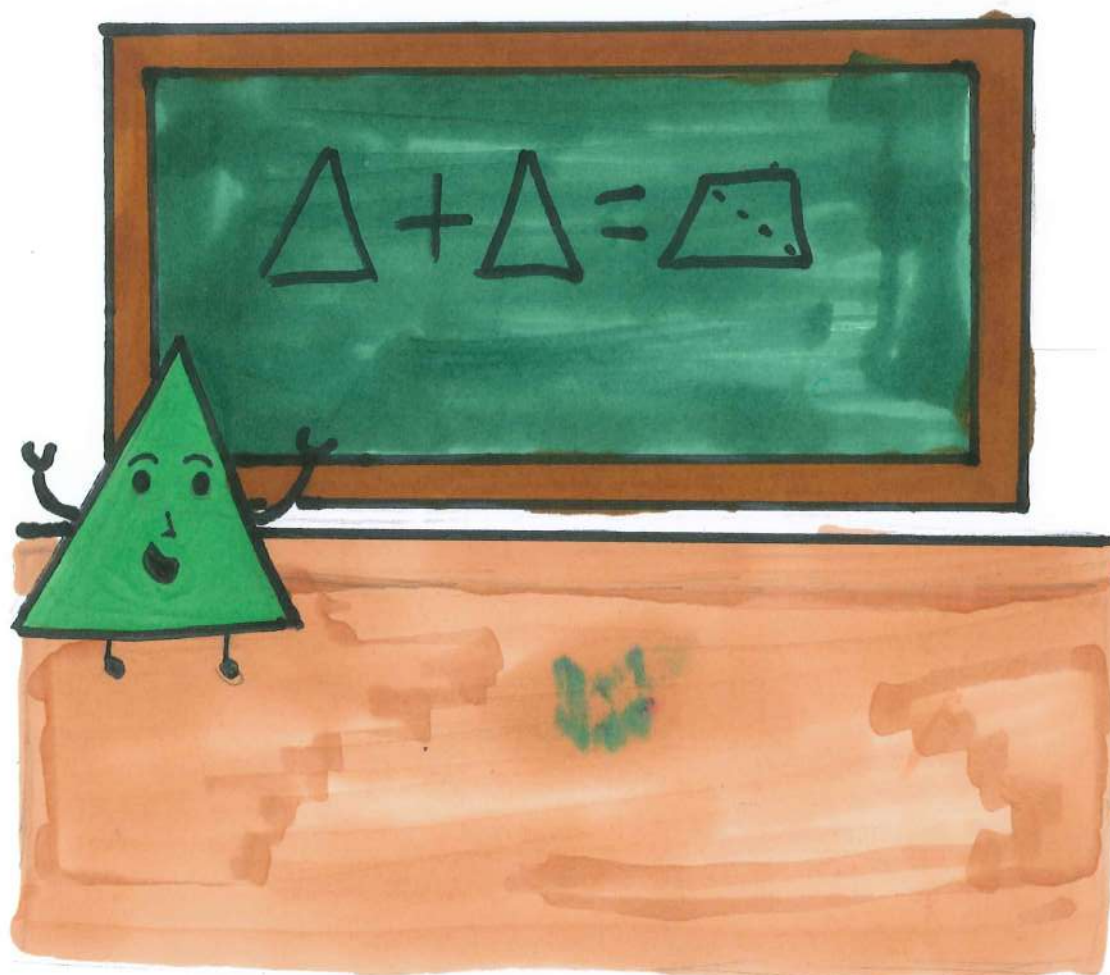
The  
Trapezium  
Kingdom



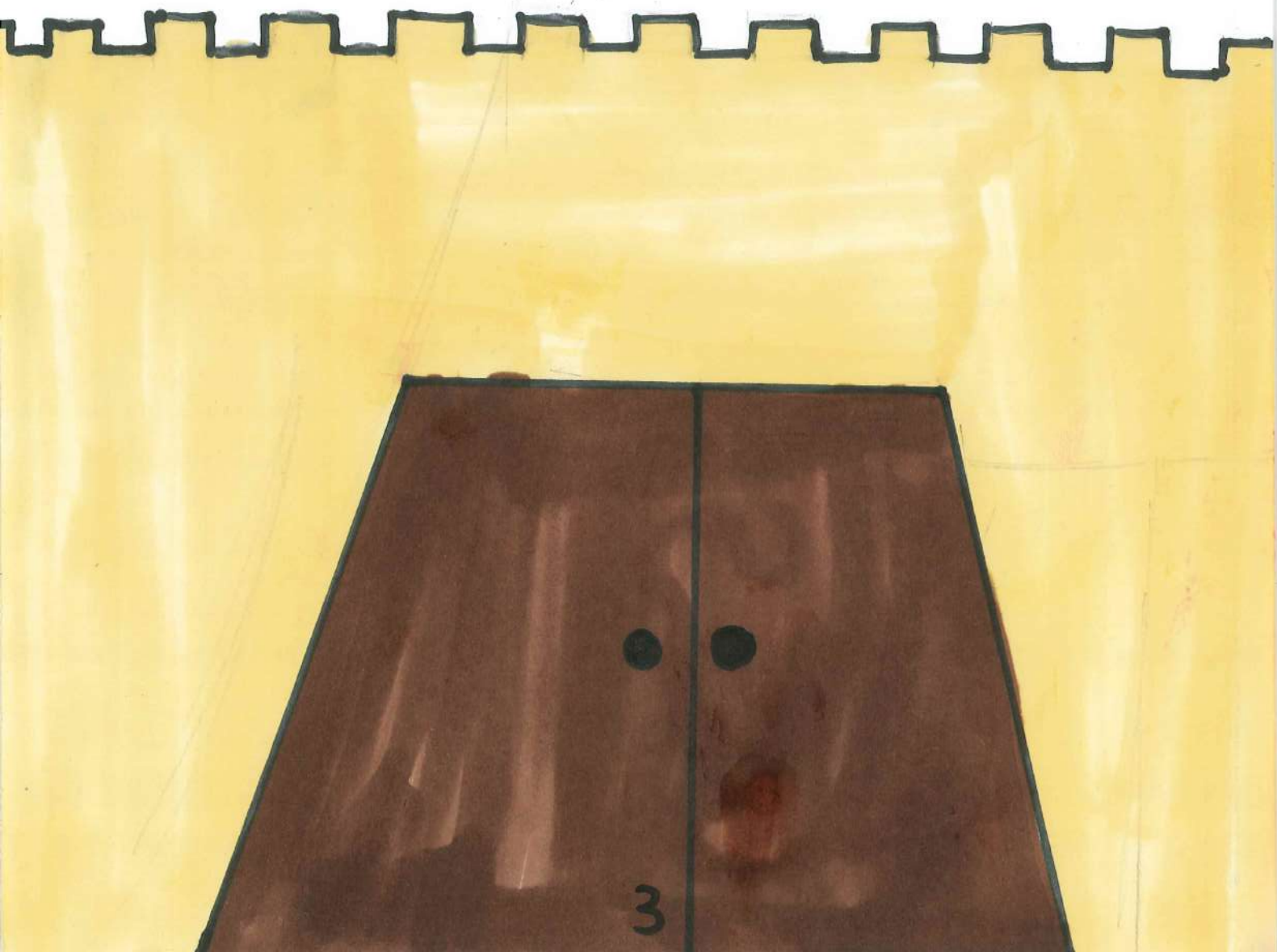
One day the twins of Triangle Kingdom, Mandy, and Sandy the troublemakers, read a book about the Trapezium Kingdom, and they found out that it was the only place left that still sold their favourite candy, Sugarmonsters which was sugar-coated and had oozing caramel that would melt anyone's mouths. They would do anything for just one bite, so they decided to find a way to sneak into the Trapezium Kingdom since only Trapeziums could enter.



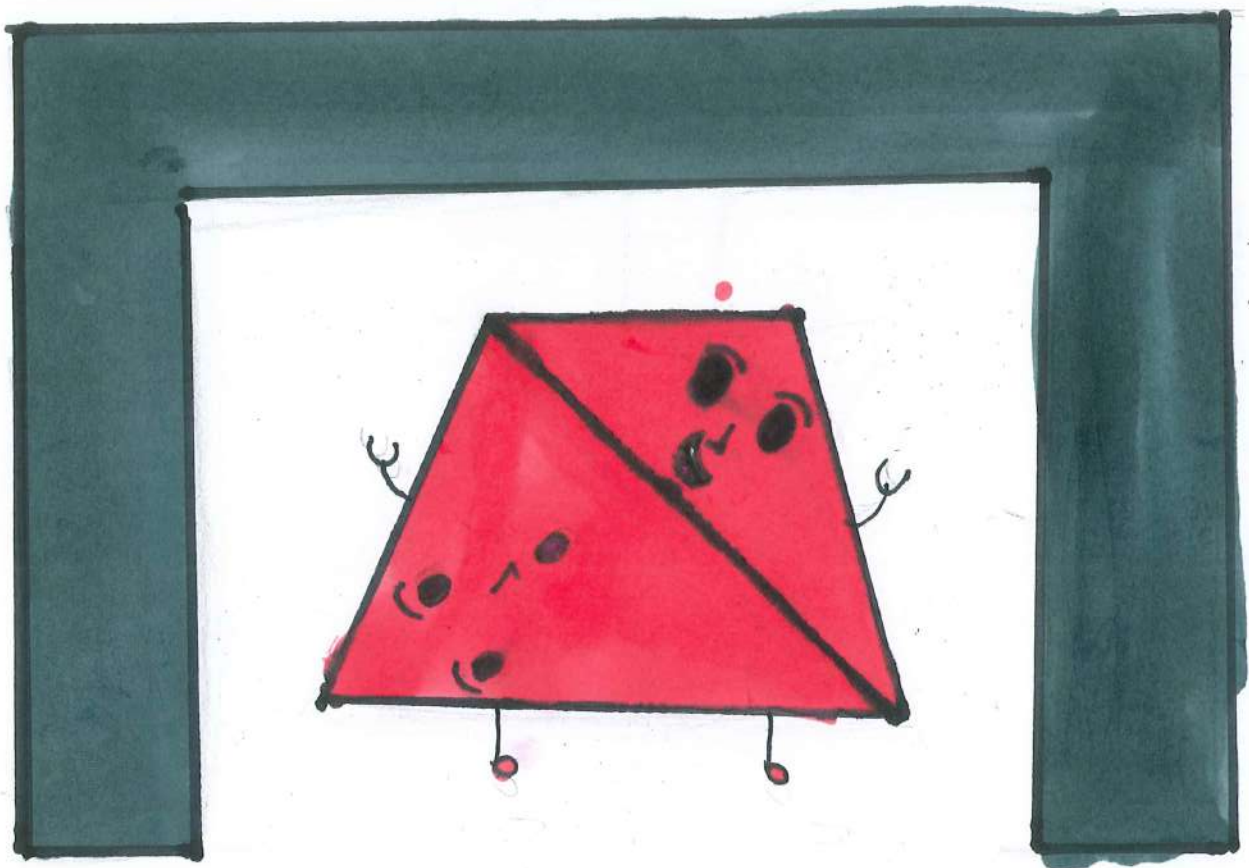
They thought and thought for days, until one day in Maths class at the Triangle School, they were learning about shapes, and they found out that if one triangle turns around and stick themselves to another identical triangle, they will turn into a Trapezium! They were so happy that they jumped with excitement on the way back home that day. Then they started working on their plan to get to the Trapezium Kingdom.



Finally, they finished up their plans and sneaked out of their room, so their parents won't catch them, after passing jungles, crossing lakes and deserts they finally saw the Trapezium Kingdom! They shrieked with excitement until they had realized that they don't know how to stick themselves to each other! They had forgot to ask the Maths teacher! But Mandy suddenly remembered that the Maths teacher saying that one triangle had to turn around and stick themselves to another identical triangle to become a Trapezium! But they forgot to bring glue! Thankfully, Sandy found some glue in her backpack because she once stuck the teacher's laptop together so that they didn't need to do the work for that day.



So Mandy applied some glue on the sides of themselves and turned around to form a Trapezium! Sandy practised walking with Mandy stuck upside down on her and finally, after hours and hours of practice, they went to the scanner to the Trapezium Kingdom! They bravely walked up to the scanner, at first the scanner was confused, but eventually, after a long time, it let them in.



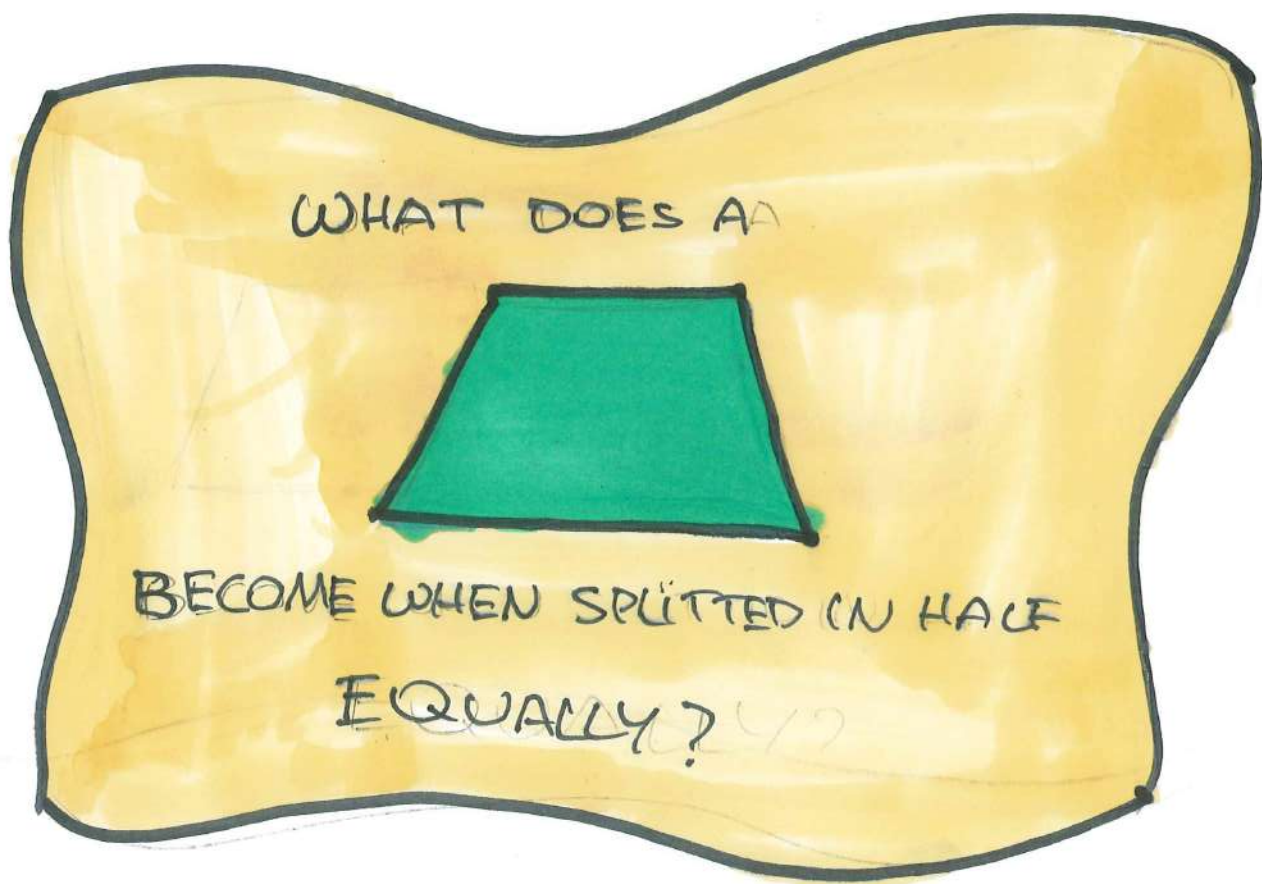
Mandy and Sandy were so excited that they jumped up and down, but soon, they realized that they have lost the map to the Trapezium Kingdom and have got lost themselves! 'Oh no!' cried Sandy, 'We're lost!' Then, a kind old lady came over and asked them what was wrong. 'We've lost the map to the Trapezium Kingdom!' cried Mandy, 'And now we are lost!' and they told her everything.

'Well,' began the old lady, 'I shall not help you for free, I shall help only under one condition!'

'What is it?' they asked curiously.

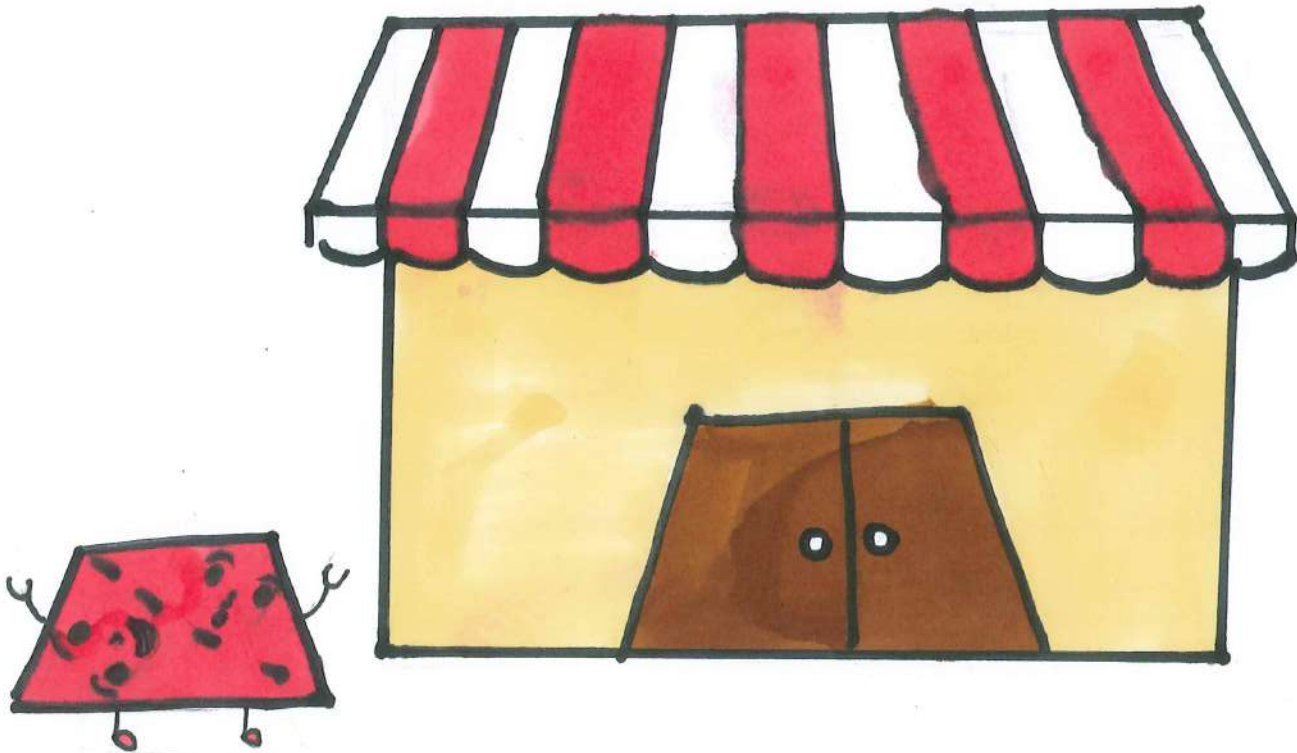
'I can't be able to solve this problem that I have to solve to to earn a ticket to the Triangle Kingdom, so I want you girls to help me so that I can help you, deal?'

'It's a deal!' said the twins excitedly.



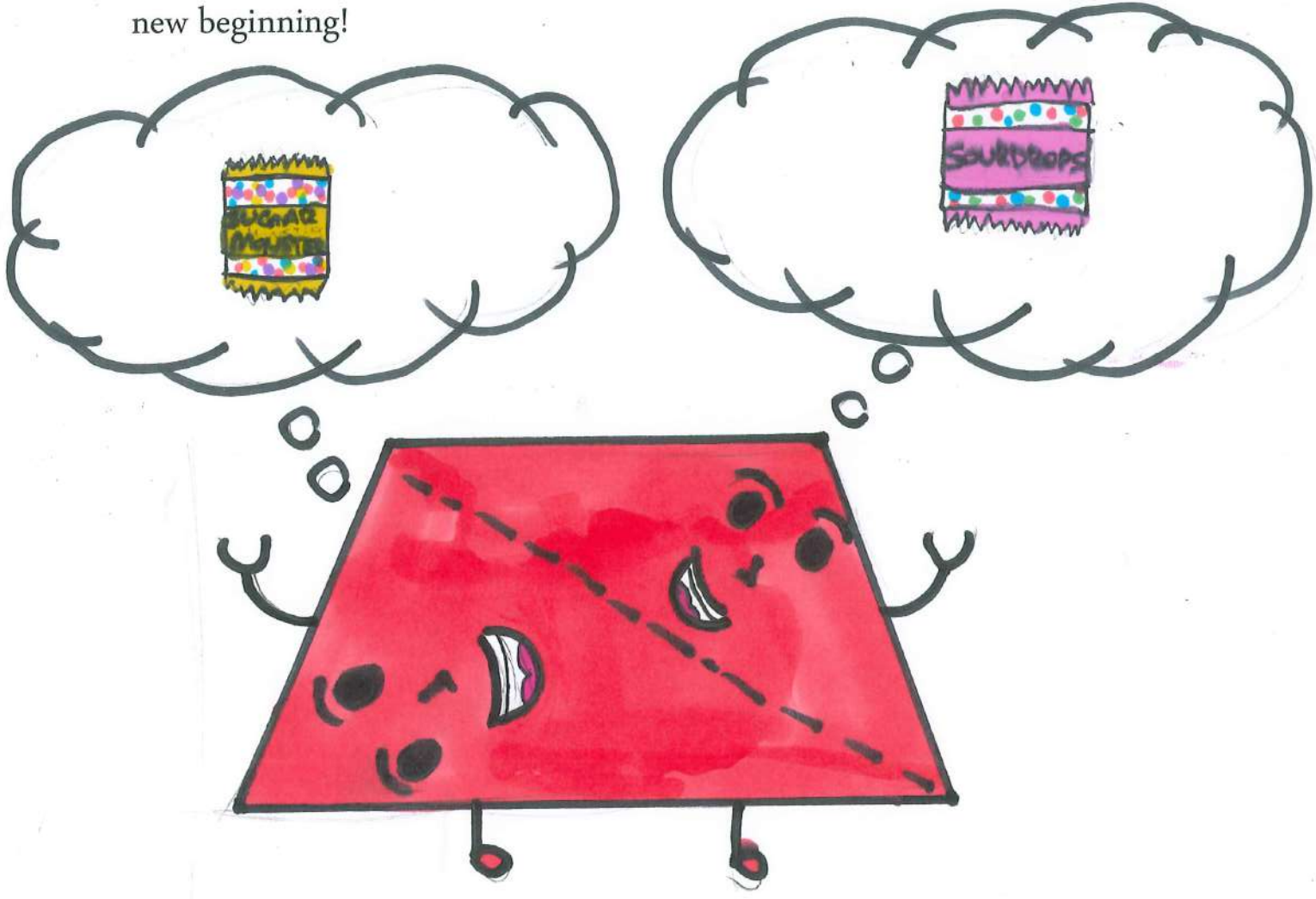
But the question wasn't hard at all to the twins, after all they had used the method to come to the Trapezium Kingdom, the question was to solve what 2 shapes the Trapeziums would become if it was split equally in half, the twins told the kind, old lady out and told her that it was 2 triangles, so the lady asked them what they needed help with.

Mandy and Sandy told her about Sugarmonsters, and she agreed to take them to the sweets shop in Trapezium Kingdom, Sugar Land and they couldn't take their eyes off a type of sweet called Sourdrops





The old lady took them around the shop and finally found the Sugarmonsters they wanted, but the Sourdrops looked far tastier and more delicious with the salty coat and the strawberry-flavoured jelly inside. So they decided it was time for a change, maybe every end has a new beginning!



SUGAR-  
MONSTERS

# About the Author!

My name is Sophia (Xinyi Chen) and I go to the International School of Paphos. I found this topic very interesting because I loved learning about shapes. I also love English, so it was really fun to add pinches of Maths in it.

Mandy and Sandy go on an exciting adventure to the Trapezium Kingdom to get to their favourite candy. Follow Mandy and Sandy to the amazing surprises waiting in the Trapezium Kingdom!