THE 2023 YOUNG MATHEMATICAL STORY AUTHOR (YMSA) COMPETITION

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

LONGLISTED

'Divide & Feast' by Jude Knoll (8 years old)
at North West London Jewish Day School (UK)

You can read the author's inspiration for the story and the judges' comments on:
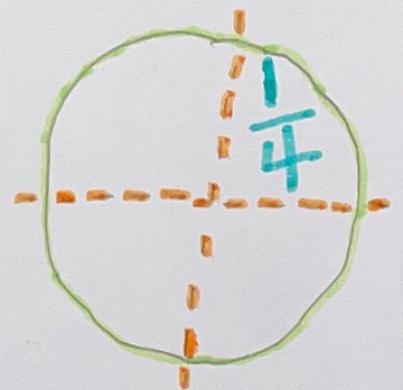
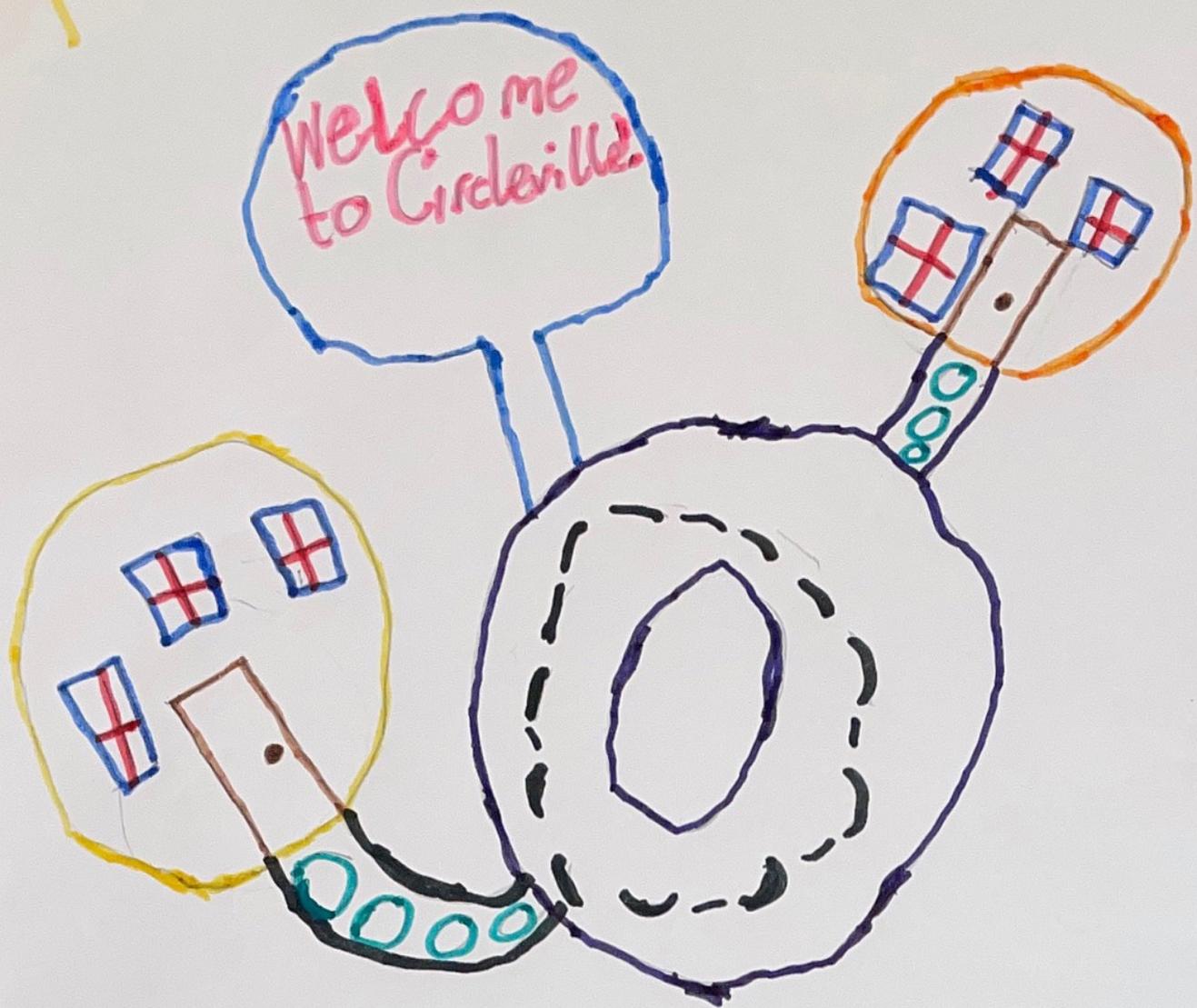**www.mathsthroughstories.org/ymsa2023**

#YMSAMaths

Divide

&

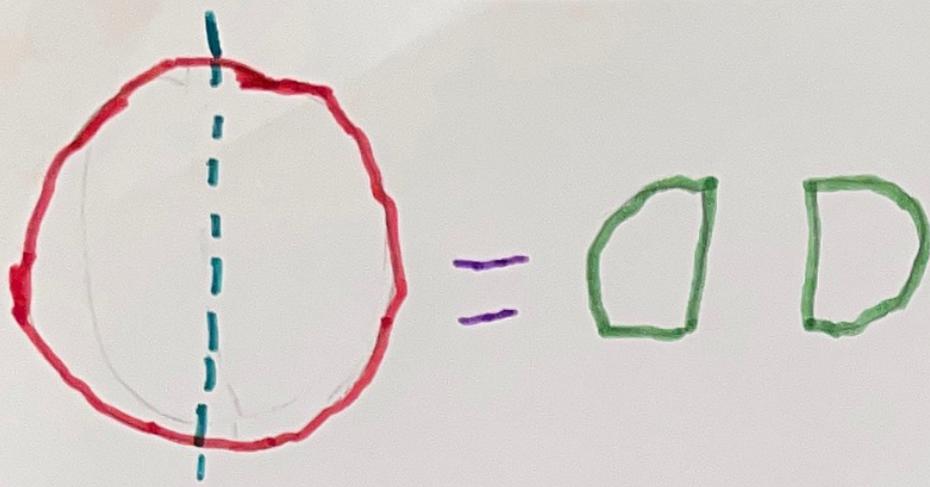# Feast

By: Jude Knoll (Age 8)
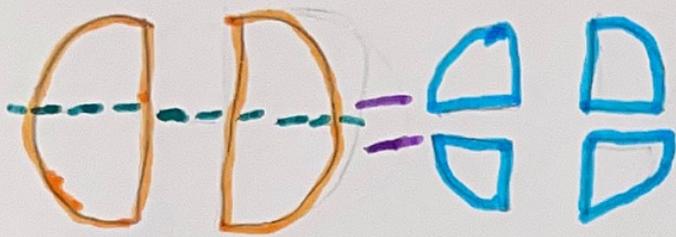
North West London Jewish Day School

In the town of Circleville, there lived two families. The Fraction Family and the Angle Family. They were good friends.
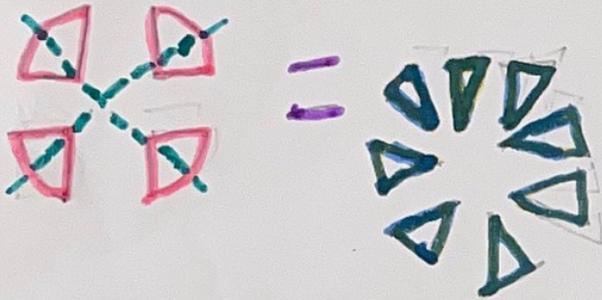
One sunny day, the Fraction Family invited the Angle Family over for a pizza party. The party was in full swing, with music, dancing and games but soon everyone was famished. Daddy Fraction had prepared a large pizza for all eight of them to enjoy. When he took it out of the oven, everyone gasped with shock. They didn't know how to split it fairly. This was a disaster! How could they do it?

$$1 \div 2 = \frac{1}{2}$$

$$\bigcirc = \bigcirc \ \bigcirc$$

$$\bigcirc\bigcirc = \bigcirc\bigcirc \ \bigcirc\bigcirc$$

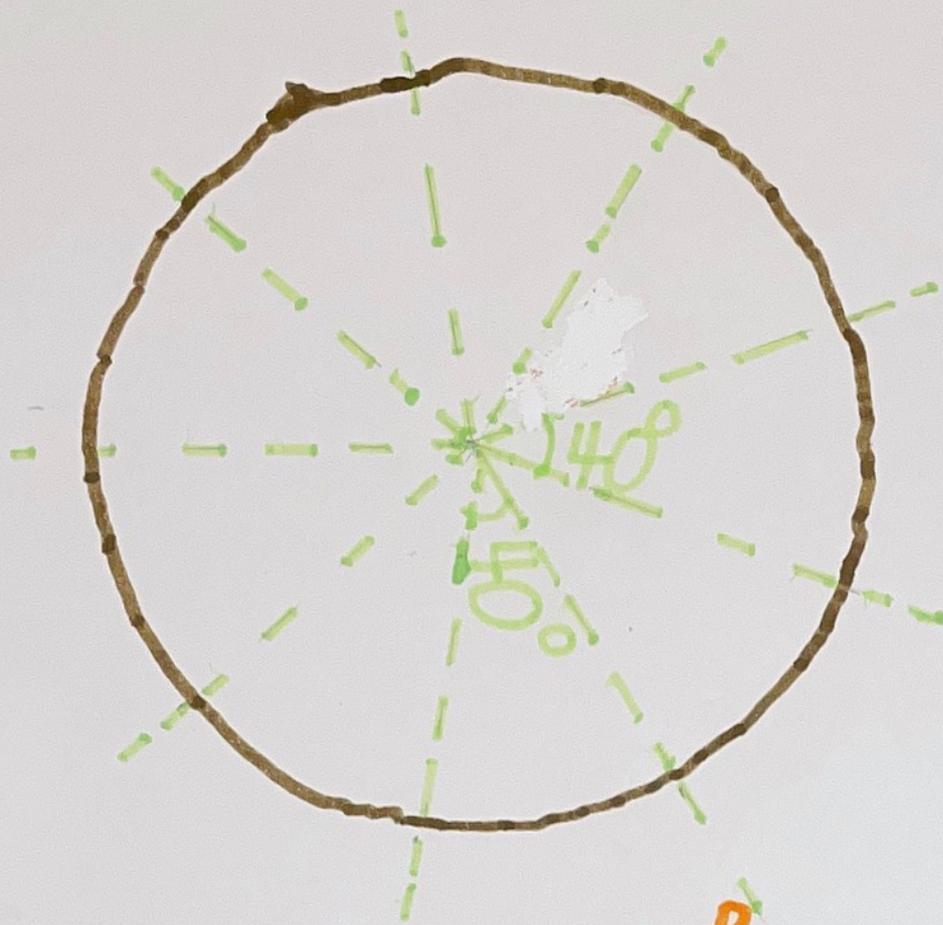$$\frac{1}{2} \div 2 = \frac{1}{4}$$

$$\bigotimes = \text{✿}$$

$$\frac{1}{4} \div 2 = \frac{1}{8}$$

Baby Susie came to the rescue. "Just split it in half," she explained. "But that only will give us two slices," whined her brother, "there are eight of us!" Susie then showed the family that if you take a half of a half, that will make quarters, and if you halve quarters, you will have eighths, one equal slice for each of them. Yay!

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The Angles had such a wonderful time, they invited
the Fractions over the following night. This time, they
also invited, their cousin, Polly Protractor. It was a
fantastic evening, they watched a movie and soon
were ready to eat. Martha Angle had made an extra-
large pizza for all 9 of them. The Fractions were
worried, their method to divide the pizza wouldn't
work this time!

$$360° \div 9 = 40°$$

Polly came to the rescue! She showed everyone that since a circle is 360 degrees, we can divide it into equal sized angle slices! 360 divided by nine equals forty. Polly took out her protractor and soon everyone had an equal slice of pizza. The Fraction and Angle families learned from each other that there are many delicious ways to divide circles. And that it's always fun to be with friends!

THE END.

"Divide & Feast" tells the story of two families in Circleville who come together for friendship and fun. Together, they discover different ways of dividing a circle using fractions and angles.