

Dissecting "  $\sqrt{2} = 1.41421\dots$  " a collage by Mark Sanders - after a poem Sarah Glaz.

$$\sqrt{2} = 1.41421\dots$$

*We started our voyage on the gulf of Tarentum.*

The map forming the backdrop to this collage is of Southern Italy and features the Gulf.

*The sea was choppy*

*and the brothers were restless.*

As indicated by the arms aloft figure bottom right.

*At dawn, we gathered on the deck*

*intent to solve the conflict like rational men.*

*Hippasus still refused to keep the secret.*

The background stories around the Pythagoreans are fascinating, revealing a highly secretive society, intent on keeping the mysteries of numbers to themselves. Hippasus transgressed with his discovery of irrational numbers, in particular  $\sqrt{2}$ .

The figure of Houdini, bound in chains and padlocks reflects the laws of secrecy by which the group bound themselves; the word TRUTH emblazoned as if to indicate Hippasus's desire to reveal that which his friends felt should not be shared. The "Sshhh..." face, top right, represents the 5-year vow of silence taken by newcomers to the group in order to prove their commitment to the cause.

The ammonite here represents the diagram which shows the construction of irrational numbers according to Pythagorean theorem; and the gloved hand carefully holds these secrets.

*He had discovered that*

*the diagonal of a square*

*is incommensurable*

*with its side.*

The collage itself is a square in form.

*Alas! Our world had collapsed*

Shown here as the flames, bottom right and the collapsing buildings bottom left.

*and so did our geometric proofs.*

*Too much to lose, we heaved him overboard.*

The drowning figure of Hippasus is shown here, uttering his discovery (across the diagonal of the square) even as he is taken down by the waves.