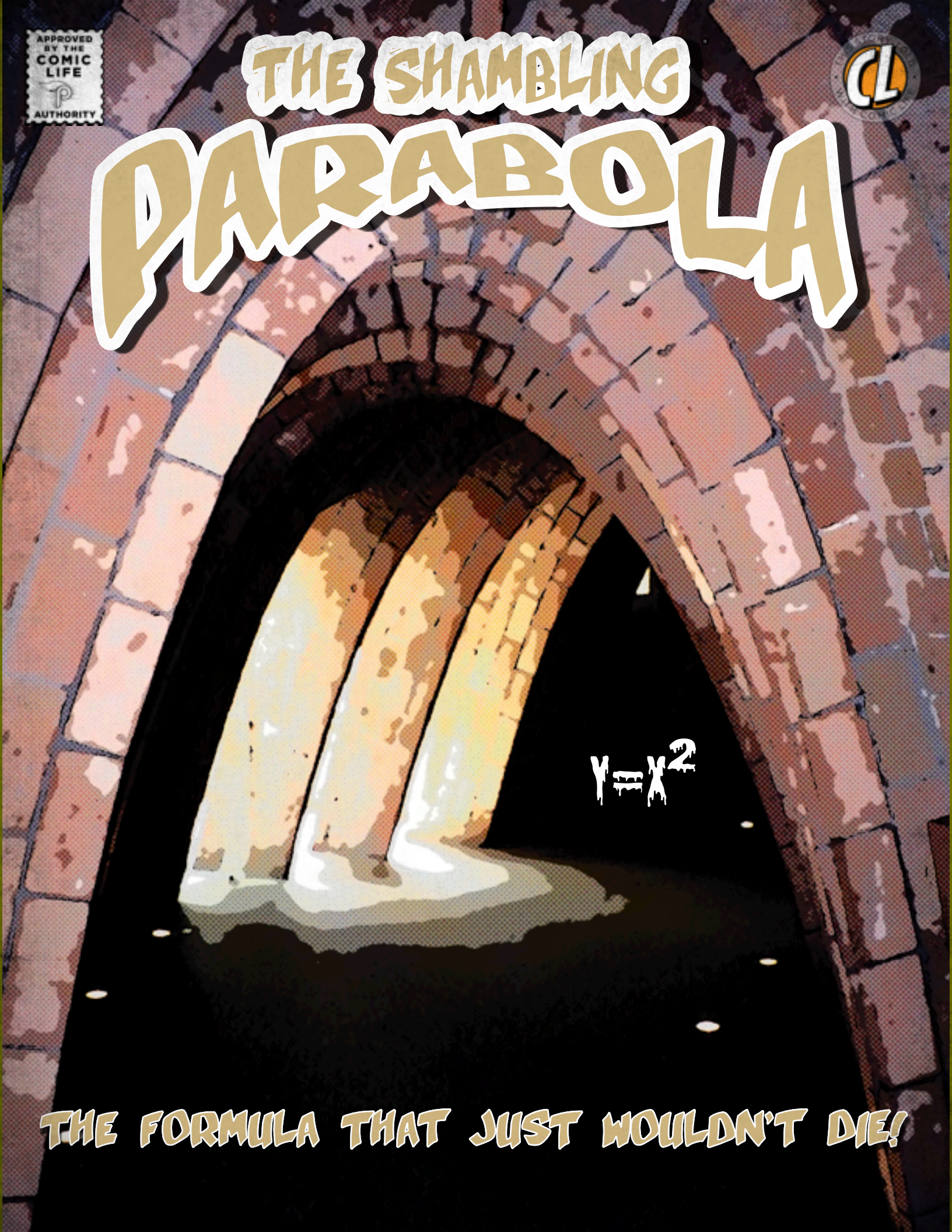

APPROVED BY THE COMIC LIFE AUTHORITY
THE SHAMBLING
PARABOLA
$Y=X^2$
THE FORMULA THAT JUST WOULDN'T DIE!

In mathematical terms, if x is the length of the side of the field, m is the amount of crop you can grow on a square field of sidelength 1, and c is the amount of crop that you can grow, then c=mx^2

I WISH THIS EQUATION WOULD JUST DIE... THEN I WOULDN'T HAVE TO PAY YOU.

I STILL NEED TO SOLVE FOR X TO DETERMINE HOW BIG A FIELD TO PLANT.

EASY! X IS EQUAL TO THE SQUARE ROOT OF CROPS DIVIDED BY AMOUNT YIELDED!

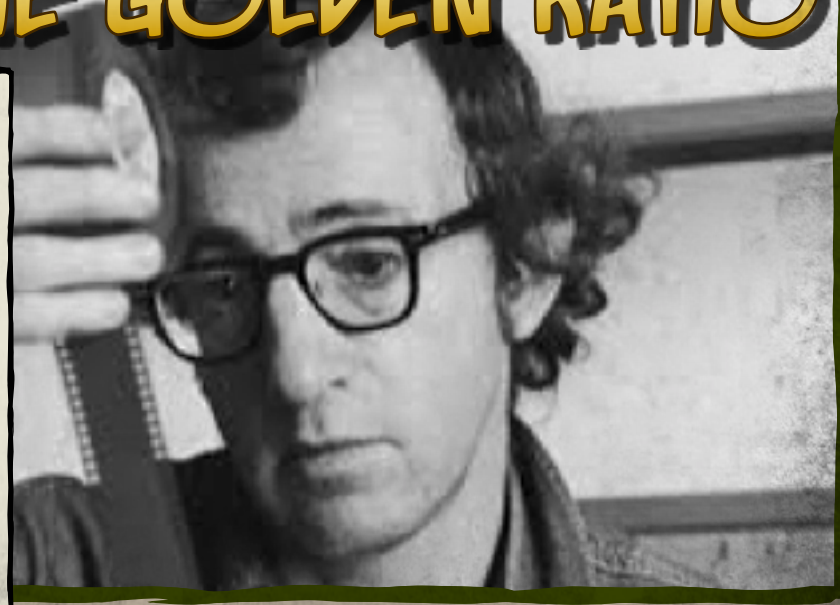
I LITERALLY HATE YOU.

1000 YEARS LATER...

THE GREEKS DECIDED THEY JUST HAAAAD TO FIGURE OUT A SOLUTION FOR THE EQUATION X 2= 2

$$x = \frac{\sqrt{5}-1}{2} = 0.61803\ldots$$

THE GOLDEN RATIO



THE GOLDEN RECTANGLE CAN BE SEEN IN THE SHAPE OF WINDOWS, ESPECIALLY ON GEORGIAN HOUSES.

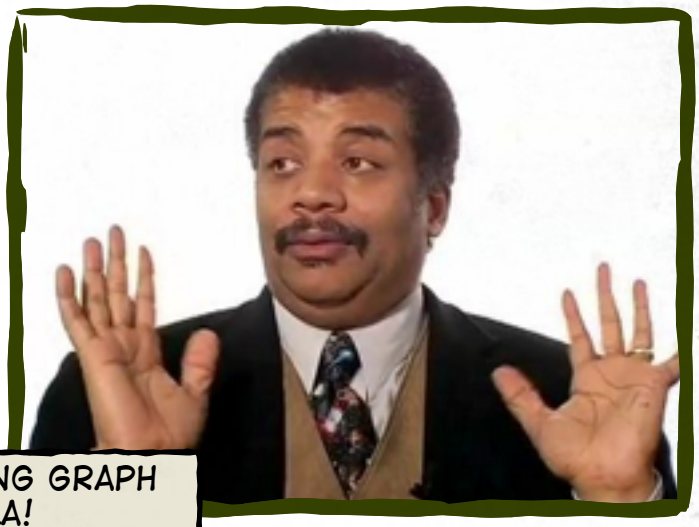
MORE RECENTLY, THE GOLDEN RATIO CAN ALSO BE FOUND AS THE "PERFECT SHAPE" FOR PHOTOGRAPHS AND FILM IMAGES. SO THINK ABOUT THAT NEXT TIME YOU TAKE A SQUARE INSTAGRAM PHOTO... YOU'RE RUINING THOUSANDS OF YEARS OF MATHEMATICAL DISCOVERY. AND THE NEXT TIME YOU'RE WATCHING NETFLIX FOR EIGHT HOURS IN A ROW THINK ABOUT HOW PERFECT THE IMAGES LOOK AND REMEMBER THE GOLDEN RECTANGLE.

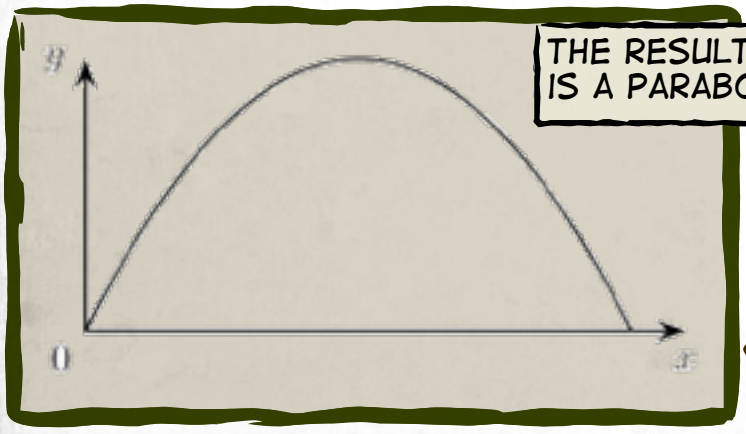
THE EQUATION THAT SAVES LIVES

AND GETS YOU MONEY

$$y = \left(\frac{v}{u}\right) x - \left(\frac{g}{2u^2}\right) x^2.$$

DID YOU KNOW THAT YOU ARE PART OF THIS EQUATION EVERY TIME YOU'RE IN A CAR THAT ACCELERATES AND STOPS?





THE RESULTING GRAPH IS A PARABOLA!

WHO CARES?!

TRAFFIC COPS

INSURANCE COMPANIES

CAR DESIGNERS

A mobile phone works by converting your speech into high frequency radio waves and the behavior of these waves can then be calculated using further formulae involving i . So we can say with justification that without the simple quadratic equation x^2 = -1 the mobile phone would never have been invented.

Super long story sort of short:

Imaginary numbers were created when mathematicians faced the problem x^2 = -1 The "cheat" they created was to just make up an answer by defining it using the symbol i. Now i^2 = -1, which means it can't be a real number, so it's imaginary.

And we apply our understanding of i and quantum theory to calculate "wave number" of a quantity to create this partial differential equation:

$$i\frac{\partial u}{\partial t} + \nabla^2 u + v(x)u = 0.$$

Understanding the motion of these electrons is what allows us to design integrated circuits for things like computers, cars DVD players and mobile phones.