The Square Root of Two is Irrational

(to be done in a white room)

by contradiction: assume

$$2^{1/2} = \frac{m}{n}, \quad m,n$$

have no common factors

so $2 = \frac{m^2}{n^2}$

or $2n^2 = m^2$

an n-person stands
beneath an m-person
they are not both
carrying two oranges:
if so, cancel
the oranges
from here on you must
accept: anyone
either carries two oranges

or else makes magic
if m is a magician
his square is fruitfree

so $m = 2p$ (*)

p a p-person

and directly:

$2n^2 = 4p^2$ on canceling so

$n^2 = 2p^2$ reasoning as back there (*)

$n = 2q$ q a q-person

now m and n retire: they
were unwell: at dawn dressed
as flies they were forced
to undergo a mock execution
in fact they balanced each
other badly long hair tang-
ling their feet question
them--- they evade and shift
their hands hidden behind
their backs burn with the
scent of rind

$m = 2p$ see?

$n = 2q$ see?

see?

the true wizard is

PYTHAGORAS:
his spirit holds sway

(but cannot be seen
in this white room)