Poems About the Cubic

by Math 371 (Fall 2006)

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Jose Asturias

A friend of mine, the third from last, **(x is the third from last letter in the alphabet)**
Is hard to find, but nonetheless,
He is what makes YOU not the WE **(since $u - v = x, x$ is the difference between them)**
And it's the first step one should see
Who needs my friend then, you may ask,
If YOU and WE perform the task? **(x can be substituted with** $(u - v)$**)**
Engage the difference 'bout three times, $((u - v)^3)$
Mix in with **P**inch of other kind, $(+p)$
And in what follows in the l9ine (q **is the letter that follows** p**, therefore** $(+q)$**)**
And rest with nothingness in mind $((u - v)^3 + p + q = 0)$
From that, two brothers come to light **(from that condition of** $3uv - p$ **and** $u^3 - v^3 + q$ **arise)**
In order to hold things in right,
Both hold to nothing in the end, **(both of the equations equal to zero)**
But lay the path to find my friend.
So take the brother with the face
That doesn't hold the CUE'S trace, $(3uv - p = 0)$
And shake him up a bit to end **(rearrange the equation)**
With WE and three of YOU to stand **(end up with** $v = p/3u$**)**
Another player don't forget, **(refers to** p**)**
That rides the YOUs, or you'll regret.
So now the other brother wants the cut,
And puts the first one in his gut. **(substitute this equation into** $u^3 - v^3 + q = 0$ **for** v**)**
To free up space, he must exchange
His own WE for newer face. (v **is substituted with** $p/3u$**)**
But wait, more change is on the way –
The YOU three times is here to stay,
It is the same as question WHY (y **should be set to equal to** u^3**)**
Which does indeed in thrice YOU lie
So find the answer to the WHY; **(solve for** y**)**
And find YOUrself for one last time, **(with** y**'s value, solve for** u**)**
YOUrself should lead you to the WE – **(then, solve for** v**)**

The sense of all this time you'll see.
Remember now that my friend IS what makes difference in the end ($x = u - v$)
So use YOUrself and use the WE, **(solve for** x)
And finally, my friend you'll see.

Anna Geyer

A troubled Frank sought the solution
to his life's problem
Frank was a cubed ex, along with a p'd ex,
and queue tagged along, too.
But ex is replaceable, just you less vee.
Frank split in two,
each part wanting to be naught.
why became the cube of you?
Again Frank changed, but
the problem could be solved.
And thus you was the third root,
that of a negative Queue, halved,
along wiht another root,
this time two,
of a squared half-Queue,
and a cubed third-Queue.
Vee was left to be,
now another third root
but of cubed you, with Queue.
now Frank could rest easy,
his woes were over

Neha Kamani

Mind your ps and qs they say,
Then dive deep into the foray
There she lies composed and discrete
Break her up, make it short and sweet

She lies there broken shards of glass,
Oh look how she looks now, so prosaic,
They meld together! What is going on,
Two exquisite pieces of mosaic!

The king gets greedy, what are they worth?
Set each to the test, immerse them in fire
They meld together,
A new mosaic?
A new queen rises, again prosaic!

She has seen the world,
She will not smile,
Put her in a carriage,
Let her rest. Shave off her baggage.
She wakes up, happier, more rested
Almost ecstatic,
As easy to understand as a simple quadratic!

I will tell you my secret, Those
Those two mosaics, they are prosaic
But there is beauty, there are mysteries
An unveiling simple histories.
Mind your p's and q's they say
Now you see why,
That is where all the secrets lie.

Ray Sehgal

This presents a solution to an equation of the form

$$f(A) = A^3 + sA + t$$

look at the dots on top of the letters then loop back to the beginning and follow the dots on the bottom of the letters.

ȦNNABEL LEE
by Edgaṛ Allen Poẹ

İt was many and many a yẹar ago,
In a kiṇgdom by the sea,
That a maiḍen there lived whom you may know
By tḥe name of ANNABEL LEE;–
And this maiden she lived with no oṭḥeṛ thought
Than to loveẹ and be loved by meẹ.

She was a child and I was a child,
In this kingdom by the sea,
But we loved with a love that was more than love –
I and my Annabel Lee–
With a loḍve ṭhat winged seraphs oḟ heave
Coveted her and me.

And this was the reason that, long ago,

In this kingdom by the sea,
A wind blew out of a cloud by night
Chilling my Annabel Lee;
So that her high-born kinsman came
And bore her away from me,
To shut her up in a sepulchre
In this kingdom by the sea.

The angels, not half so happy in Heaven,
Went envying her and me:–
Yes! that was the reason (as all me know,
In this kingdom by the sea)
That the wind came out of a cloud, chilling
And killing my Annabel Lee.

But our love it was stronger by far than the love
Of those who were older than we –
Of many far wiser than we-
And neither the angels in Heaven above,
Nor the demons down under the sea,
Can ever dissever my soul from the soul
Of the beautiful Annabel Lee:–

For the moon never beams without bringing me dreams

Of the beautiful Annabel Lee;

And the stars never rise but I see the bright eyes

Of the beautiful Annabel Lee;
And so, all the night-tide, I lie down by the side
Of my darling, my darling, my life and my bride,
In her sepulchre there by the sea–
In her tomb by the side of the sea.

Daniel J Singer

Let $\boldsymbol{P}$ be the following lines:
This is not a poem which describes a method to solve the cubic of the form $f(x) = x^3 + px + q$
$\alpha = \sqrt[3]{-\frac{Q}{2} + \sqrt{\left(\frac{Q}{2}\right)^2 + \left(\frac{P}{3}\right)^3}} - \sqrt[3]{\frac{Q}{2} + \sqrt{\left(\frac{Q}{2}\right)^2 + \left(\frac{P}{3}\right)^3}}$
α is not a root of the cubic of that form
but α is also not in a magazine of porn.

Claim $\boldsymbol{P}$ is a poem that satisfies the conditions given.

Proof. $\boldsymbol{P}$ clearly describes a solution to the cubic.

$\boldsymbol{P}$ is less than 1 page by inspection.

Also I take it to be clear that if person X knows that $\boldsymbol{P}$ describes a method to solve the cubic it is obious that the clear source of that method is the second line.

It is left to show that the second condition is satisfied and that $\mathcal{P}$ is a poem.

Claim If Γ does not know γ, then Γ cannot (and would not) recognize γ as long as γ is not self-referential.

Proof. I take it to be clear that in order for a person to recognize something, that person must have knowledge of that thing. One may be inclined to object that if an object provides information about itself (such as having a sign that says "I am a sentence") a person may recognize that object. I do not believe this holds, but I will grant this objection and provide the given stipulation. □

Therefore if X does not know math, he does not a method to solve the cubic.

Therefore X would not recognize $\mathcal{P}$ as such.

Claim $\boldsymbol{P}$ is a poem.

Proof. $\boldsymbol{P}$ rhymes and who are you to say it is not a poem? □

□

Panayiotis Thomakos

Complex Family

The son was a great, great, great grandchild,
of the deceased brother of the mother,
who was married to the great grandchild of his second cousin,
this cousin loved the third cousin of the fathers sister

The daughter was a great, great, great grandchild,
of the third cousin of the son,
this cousin loved the mother.

But cursed he was to find, that taking the
daughter from the son would only solve his problems!

Explanation (pg 544)

Proof. son $= u$, daughter $= v$
g grandchild $= \surd$, g $\cdot$ g $\cdot$ g $\cdot$ grandchild $= \sqrt[3]{}$
deceased = - (minus)
maried/loved = + (plus)
brother $= /2$, sister $= /3$
father $= p$, mother $= q$
2nd cousin = squared, 3rd cousin = cubed.

son = g $\cdot$ g $\cdot$ g $\cdot$ grandchild $\Rightarrow u = \sqrt[3]{}$
deceased brother of the mother $= -\frac{q}{2}$
who was married to the g $\cdot$ grandchild $+\surd$
of his second cousin $(\frac{q}{2})^2$ his $= \frac{q}{2}$

this cousin $(\frac{q}{2})^2$ loved $(+)$
the third cousin of the fathers sister $(\frac{p}{3})^3$
$\rightarrow u = \sqrt[3]{-\frac{q}{2} + \sqrt{\left(\frac{q}{2}\right)^2 + \left(\frac{p}{3}\right)^3}}$

daughter = g $\cdot$ g $\cdot$ g $\cdot$ grandchild $\Rightarrow v = \sqrt[3]{}$
3rd cousin of son (u^3)

this cousin loved the mother $+q$
$\Rightarrow v = \sqrt[3]{u^3 + q}$

taking daughter from son $\Rightarrow x = u - v$ $\square$

Jeremy Weiss

Gerolamo fights without his might.
his craft revealed by trickery.
he sails as the lone captain,
gives his first officer to the plank,
he adjusts his second mates and rowmen,
accordingly before he leaves port.
His genius found the perfect crew.
Splits the mates in two, and divides the rowmen in three,
And chooses among each twice and thrice.
They're good if they're Square.
Gerolamo knows mutiny from Monte Cristo.
He takes their good side
and joins them with his unchosen mates.
But caution precedes craft and revolt
tells him to take their differences.
Gerolamo experiments with many and few
measures the liters of whiskey per man
recording the height for sober safety.
He finds his answer not in his mates
or his men, but in their whiskey.
Gerolamo notes the difference in whiskey consumed,
the difference in height means more whiskey for him,
to booze in celebration of his triumph.