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January 2001

Regulars

## Letters



### Bernoulli's Equation

Hi, my name is Mark Anthony and I reside In Gibraltar. I am a fire-fighter within this country and I am currently studying to do exams in March with the institute of fire engineers in the U.K. I am studying for a science paper within the Membership field and I have come across the topic of Bernoulli's equation which I am having quite a problem in understanding. The equation is used in order to find out pressures differences, and for measuring flows in pipes.

Could it be possible to give me some information in order to solve questions concerning the above?

**Mark Anthony**

*Dear Mark, You may find the following articles from Issue 1 useful:*

[Daniel Bernoulli and the making of the fluid equation](#)

and

[Understanding turbulence.](#)

**Mike Pearson**

### Googol

I just wanna know exactly what a googol is? And Infinity. I know these might be dumb questions for you all but if you don't mind I would appreciate the help. Thanks a lot.

**Geoed1@uswest.net**

*We published an explanation of the googol in our [issue11 letters page.](#)*

**Mike Pearson**

## Praise for *Plus*

What a great site!

I teach English to French third year maths undergraduates (amongst others) and find your site a great source of ideas.

Thanks, and keep up the good work. I'm almost tempted to take up maths again after 15 years' break!

Lucy Georges

*Dear Lucy,*

Thanks for the compliments – it is always good to hear from people about how they use the site!

## Equation puzzle

Can you help me with my maths homework?

The question is

$$\begin{array}{rcl} f(x) & = & 4x^3 - 3x^2 + 7x - 8; \\ x & = & 2/3. \end{array}$$

I don't want the answer but I don't understand the question!

Thanks

Katy Evaskitas

*Dear Katy,*

A good place to ask this sort of question is on the askNRICH bulletin board. (Go to <http://nrich.maths.org>, click on "askNRICH" in the menu bar, and post your question in the "Statue of Anonymous" topic.)

As for your homework, I think the question is likely to be:

"What is the value of  $f(x)$  when  $x = 2/3$ ?"

...and to work that out you simply replace  $x$  with  $2/3$  wherever  $x$  appears in the formula for  $f(x)$ . Then work out the answer.

Mike Pearson

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*Plus* is part of the family of activities in the Millennium Mathematics Project, which also includes the NRICH and MOTIVATE sites.