Where is a good place to brush up on some math?

Asked 16 years, 3 months ago Modified 11 years, 2 months ago

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5

Math skills are becoming more and more essential, and I wonder where is a good place to brush up on some basics before moving on to some more CompSci specific stuff?

A site with lots of video's as well as practice exercises would be a double win but I can't seem to find one.

math computer-science algebra discrete-mathematics

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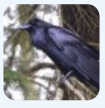
edited Sep 6, 2011 at 20:32

Iterator

20.6k ● 12 ● 78 ● 113

asked Sep 23, 2008 at 7:39



metacontent

1,356 ● 1 ● 14 ● 18

11 Answers

Sorted by: Highest score (default)

5

It depends on your math level. You should start by revising what you should know till that moment and then go further to algorithm mathmatics, geometry (transforms and etc), statistics and more.

There are tons of places on the internet were you can learn:

http://www.math.cornell.edu/Courses/courses.html

http://ocw.mit.edu/OcwWeb/web/courses/courses/index.htm

http://mathworld.wolfram.com/

and the list is open.

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answered Sep 23, 2008 at 7:47

INS

10.8k ● 8 ● 61 ● 93

4

I recommend Project Euler if you want to train number theory and discrete maths. Lots of fun exercises, though you need to know a bit of programming.

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edited Dec 9, 2011 at 11:43

Joey

354k ● 86 ● 698 ● 694

answered Sep 23, 2008 at 7:49

finalman

774 ● 5 ● 14

3

Steve Yegge had a good blog post Math for programmers

Quoting some of it:

> "But a few things I've learned recently might surprise you:
>
> 1. Math is a lot easier to pick up after you know how to program. In fact, if you're a halfway decent programmer, you'll find it's almost a snap.
> 2. They teach math all wrong in school. Way, WAY wrong. If you teach yourself math the right way, you'll learn faster, remember it longer, and it'll be much more valuable to you as a programmer.
> 3. Knowing even a little of the right kinds of math can enable you do write some pretty interesting programs that would otherwise be too hard. In other words, math is something you can pick up a little at a time, whenever you have free time.
> 4. Nobody knows all of math, not even the best mathematicians. The field is constantly expanding, as people invent new formalisms to solve their own problems. And with any given math problem, just like in

> programming, there's more than one way to do it. You can pick the one you like best.
>
> 5. Math is... ummm, please don't tell anyone I said this; I'll never get invited to another party as long as I live. But math, well... I'd better whisper this, so listen up: (it's actually kinda fun.)"

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edited Jun 20, 2020 at 9:12

Community Bot

1 ● 1

answered Sep 23, 2008 at 11:01

RickL

2,821 ● 3 ● 22 ● 35

How annoying! I was just about to give this answer! +1 to you! – Bob Cross Sep 23, 2008 at 15:11

2

I will be boring and recommend actually taking university courses in math. Without lectures and lessons with an assistant I know I would never be able to learn as much as I have. I just need some kind of motivation, since higher math is really hard.

That is, if you are looking for quite advanced stuff and actually want to get a deep understanding and don't want to crunch numbers. Crunching numbers is why we have MATLAB ;)

It would be good to know what level of math you have, and what you want to do with it. But I guess calculus, linear algebra and discrete math are the most useful courses to take.

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answered Sep 23, 2008 at 7:56

Hannes Ovrén

21.8k ● 9 ● 68 ● 76

Then they will probably never be very good at math. If you want to understand it and not just copy a formula and be done with it, then frankly I think university is the only option. There might be some odd exceptions, but I doubt it ;)
– Hannes Ovrén Sep 23, 2008 at 10:49

I think that's a little OTT. A good book with extensive tutorials and tests as well as university material can get you a hell of a lot along the road. I agree teachers are the easiest means of getting good at maths but just ruling it out is a little too much.
– ljs Sep 23, 2008 at 11:01

Should not rule it out completely, I agree. But since I see a lot of people (myself included) fail math courses while actually studying full time, I can't really see someone passing them on their spare time. Then again, the level of math would be relevant here. – Hannes Ovrén Sep 23, 2008 at 11:28

1

I suggest books with good tutorials throughout if you're unable to partake in a maths course. For computer science-related maths Don Knuth's Concrete Mathematics is meant to be very good.

Obviously nothing can replace a good teacher, but good tutorials can come pretty damn close. You really get to learn the subject in the tutorials I think.

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answered Sep 23, 2008 at 10:43

ljs

37.8k ● 36 ● 109 ● 124

1

Get some videos from www.aduni.org

Math courses

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answered Dec 9, 2011 at 11:38

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65 ● 10

1

It's a couple of years since this question has been asked, but there are a number of new sites and resources available now:

- Khan Academy was originally intended for schoolkids, but it has since expanded to include material that would not be out of place in first-year university courses. It serves as a great way to review and fix fundamentals. It has videos and practice exercises, and keeps track of your progress.
- EdX is an evolution of initiatives like MIT Open Courseware. It's now an alliance of universities like

MIT, Berkeley and Stanford that offer free online university level courses, with video instruction and learning materials. My only complaint is that some of their courses have prerequisites (like single-variable calculus) that you need to pick up elsewhere, like Coursera, or the original MIT OpenCourseWare site.

- Coursera offers more courses than EdX, and many of them are more basic, covering topics like pre-algebra and pre-calculus. The learning interface is not quite as cool as EdX's (which offers a scrollable captioning interface alongside most of it's videos), but the broader range of topics and courses covering fundamentals offers learning you just won't find on EdX.

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answered Oct 21, 2013 at 9:35

Gustav Bertram

14.9k ● 3 ● 45 ● 68

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A lot of the universities will actually publish their lecture materials online. So all you really need to do is find a suitable subject and then read the lecture materials and do the associated work. If you were really sneaky you could probably also go to the tutorials to get help :P

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answered Sep 23, 2008 at 7:41

mdec

5,232 ● 4 ● 27 ● 26

BetterExplained.com has some great math lectures. Its not video lectures but the author gives easy-to-understand explanations on math concepts.

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answered Sep 23, 2008 at 7:47

MrValdez

8,613 ● 10 ● 57 ● 79

Don't forget that iTunes now has available a load of maths lectures (and other subjects) from various mainstream universities - and all for free.

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answered Sep 23, 2008 at 10:28

Simon Knights

1,294 ● 3 ● 15 ● 22

Since you want to brush up your math

I would suggest you to do a G search on UCCS math online

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Or follow this link , and after registering yourself free you can browse the archives

I must say that It's common that you will find people recommending course X .

But rarely will you find people completing their recommended course ..

SO IN the case of number theory you must go for the latest course , the last offering has not high quality video ..

Also for Discrete Math ->There are no lecture notes on this site

So you have to figure out how to establish correspondence two online course (6.042 has good P sets and Notes) And The above Math course for Discrete Math .

I would discourage you to use YouTube (x minutes) tutorials , Because most of them cover Math like History ..

A good course can be found by G searching Harvard OII--

It has probability (Non Continuous) - There are P sets without solutions ..

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answered Dec 9, 2011 at 18:49

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65 • 10