

Re: Distribution of ratio of two normal distributions?

Source: <http://sci.tech-archive.net/Archive/sci.stat.math/2006-09/msg00094.html>

- *From:* David Winsemius <doe_snot@xxxxxxxxxxxxx>
 - *Date:* Fri, 01 Sep 2006 21:55:57 -0500
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David Winsemius <doe_snot@xxxxxxxxxxxxx> wrote in <news:Xns983173DBFEB13dwttttt@xxxxxxxxxxxxx>:

Jannick Asmus <jannick.news@xxxxxx> wrote in <news:44F826C4.6010100@xxxxxx>:

On 01.09.2006 13:58, Jan Sprengers wrote:

Suppose X and Y are variables with a normal distribution $N(mx, s)$ and $N(my, s)$ where mx and my are not zero and the variance is equal. What is the distribution of X/Y ?

I guess that it is close Student's t -distribution (with degree of freedom equal to 1).

Are you telling us we should be Cauchy-ous?

<http://www.pitt.edu/~wpilib/statfaq/97ratio.html>

http://groups.google.com.sg/group/sci.math/tree/browse_frm/month/1994-08?hl=en&done=%2Fgroup%2Fsci.math%2F

Scroll to bottom of :

http://groups.google.com/group/sci.stat.math/tree/browse_frm/month/1995-02/36b00b233de7ba9e?rnum=111&done=

Kevin Browns's page on the subject:

<http://www.mathpages.com/home/kmath042/kmath042.htm>

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David Winsemius

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