

# Re: Integral dt exp(-a t^2) / (b^2 - t^2)^(2/3)

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- From: "G. A. Edgar" <[edgar@xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx](mailto:edgar@xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx)>
  - Date: Thu, 14 Apr 2005 09:12:21 -0400
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>> does anybody have an idea how to solve analytically the following  
>> integral:  
>>  
>>  $\int_{0,+\infty} dt \exp(-a t^2) / (b^2 - t^2)^{2/3}$   
>>  
>> where a and b are real numbers > 0.  
>>

I think the OP intends the real 2/3 power, not a complex branch.  
So the answer should be real.

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G. A. Edgar <http://www.math.ohio-state.edu/~edgar/>  
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- **Follow-Ups:**
  - ◆ [\*\*Re: Integral dt exp\(-a t^2\) / \(b^2 - t^2\)^\(2/3\)\*\*](#)  
◇ From: Alec Mihailovs
- **References:**
  - ◆ [\*\*Integral dt exp\(-a t^2\) / \(b^2 - t^2\)^\(2/3\)\*\*](#)  
◇ From: Pedro Tamirez
  - ◆ [\*\*Re: Integral dt exp\(-a t^2\) / \(b^2 - t^2\)^\(2/3\)\*\*](#)  
◇ From: Daniel Lichtblau
- Prev by Date: [\*\*Re: Symbolic inverse of a 12x12 matrix\*\*](#)
- Next by Date: [\*\*Re: Symbolic inverse of a 12x12 matrix\*\*](#)
- Previous by thread: [\*\*Re: Integral dt exp\(-a t^2\) / \(b^2 - t^2\)^\(2/3\)\*\*](#)
- Next by thread: [\*\*Re: Integral dt exp\(-a t^2\) / \(b^2 - t^2\)^\(2/3\)\*\*](#)
- Index(es):
  - ◆ [\*\*Date\*\*](#)
  - ◆ [\*\*Thread\*\*](#)