



Difficilis topology

Nasir Germain's new spin on on
mathematics

A quick video on Difficilis topology



Basic knowledge of Difficilis topology

- need to know algebra
- Need to know geometry
- Quadratics will be frequently used
- Need to know alpha squared by beta equation

Alpha squared by beta

- A solved equation by alpha squared by beta Best Answer – I'll do it in a and b because I can't use alpha and beta. you need to look at the expansion of $(a+b)^2(a+b)^2 = a^2 + 2ab + b^2 = a^2 + b^2 + 2ab$ if you rearrange it. ok: $b/a + a/b$ needs a common denominator to add which will be $a*b$ so b/a needs to be multiplied (top and bottom) by b and a/b needs to be multiplied by a which gives $b*b/ab + a*a/ab$ or $(b^2+a^2)/ab$ using the two values given: $a+b = 7/4$ so $(a+b)^2 = (7/4)^2 = 49/16$ $a*b = -15/8$ so $2ab = -2(-15/8)$ or $-30/8$ $b^2+a^2 = (a+b)^2 - 2ab$ from the expansion above where the $2ab$ is moved to the other side so the top of the fraction becomes $49/16 - (-30/8)$ (from the two parts above) which is $49/16 + 60/16 = 109/16$ the denominator is $a*b$ which is $-15/8$ so we get $109/16$ divided by $-15/8$ change to multiply and reverse the $-15/8$ $109/16 * -8/15$ the 8 and 16 will cancel 1 and 2 so you get $-109/(2*15) = -109/30$

