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FOR DEMOGRAPHIC  
RESEARCH



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# **Demographic time**

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**A:** chronological age, time since birth

**P:** period, calendar year

**C:** birth cohort, calendar time of birth

**T:** thanatological age, time to death

**D:** death cohort, calendar time of death

**L:** lifespan, duration of life



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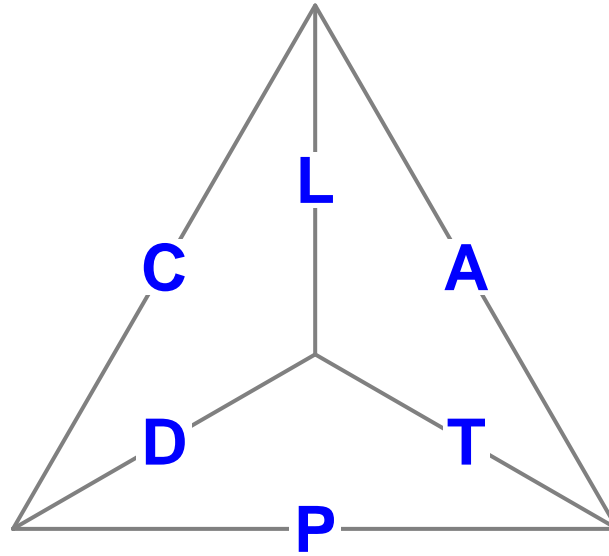




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**APC:** aligned to time of birth, no death.

**TPD:** aligned to death, no birth

**TAL:** shows variation over the lifespan, but not in calendar time.

**LCD:** lifespans positioned in calendar time, but without age.

**APCTDL:** everything in one redundant 3d relationship.



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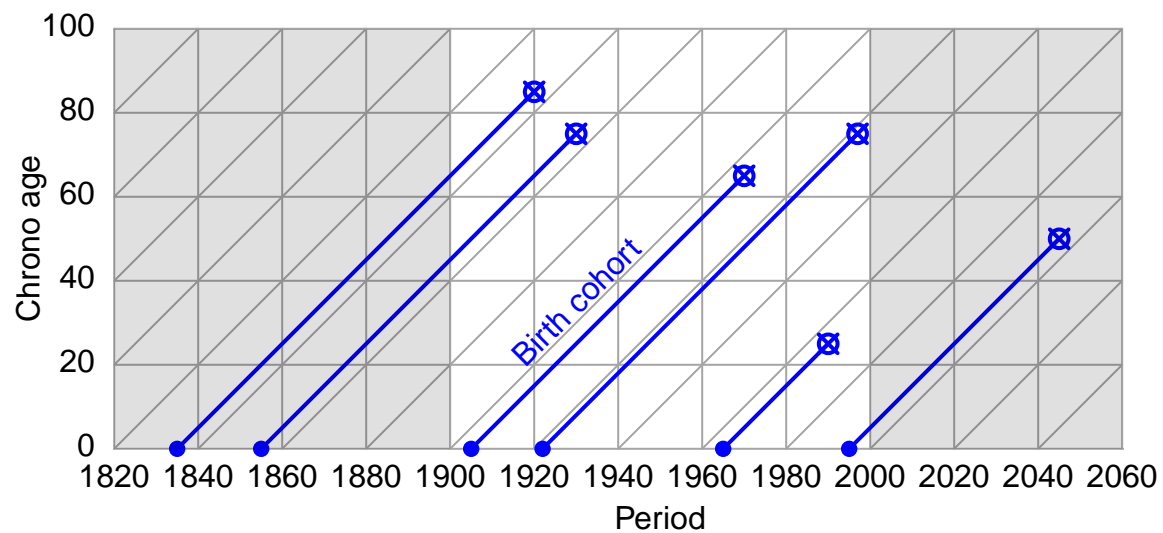
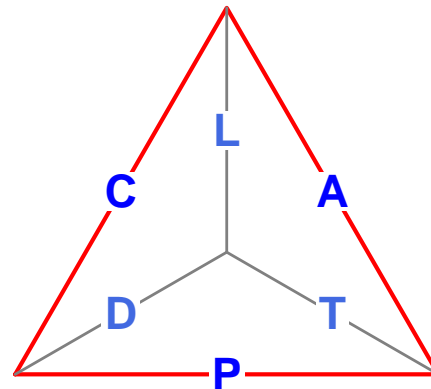
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APC





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Birth

Death





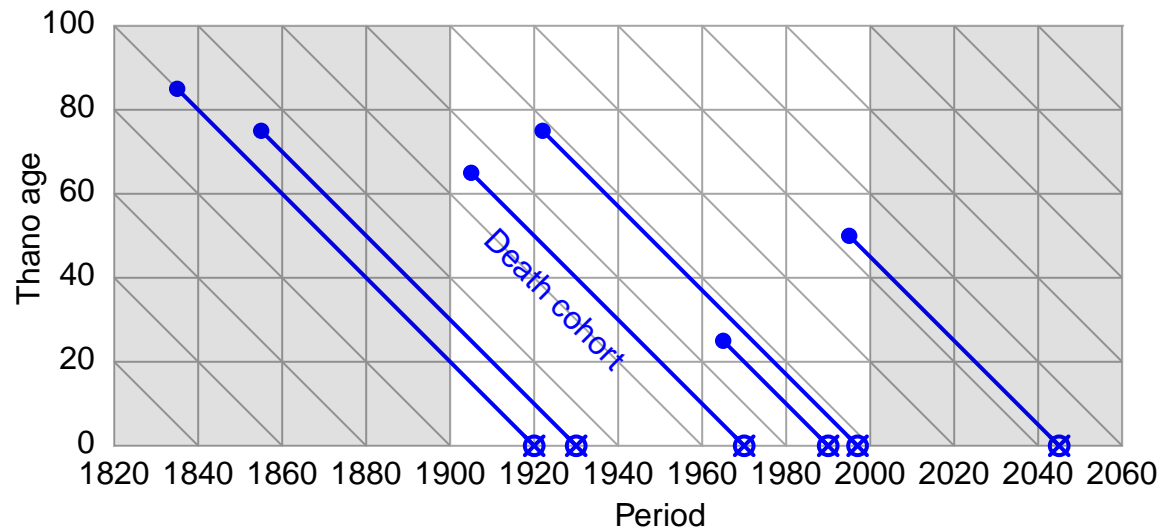
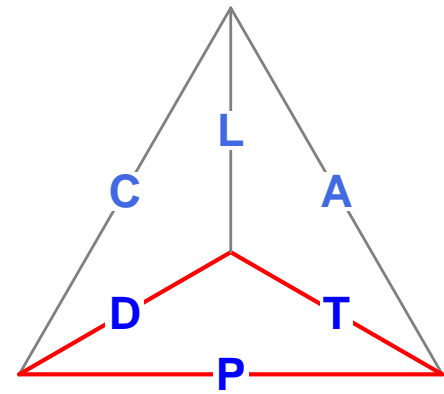
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TPD





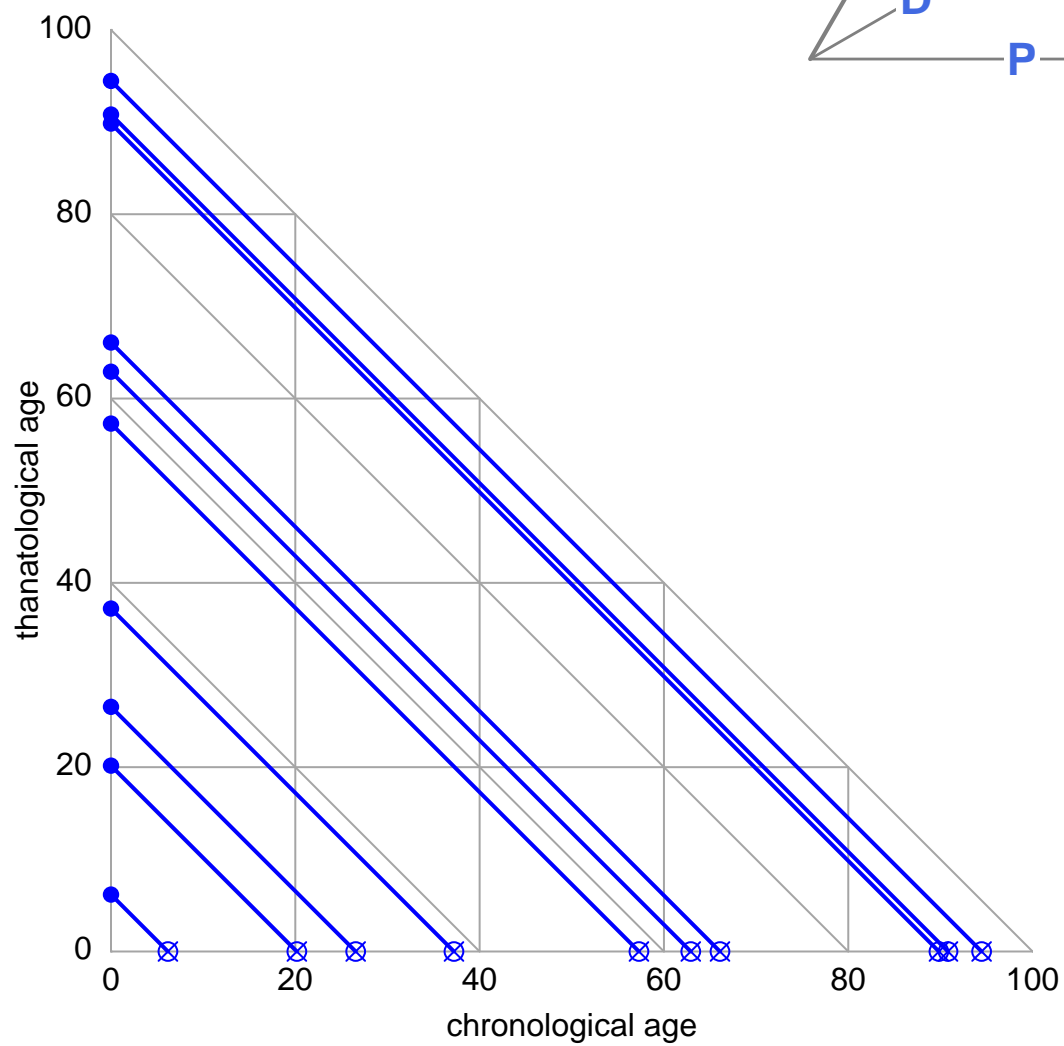
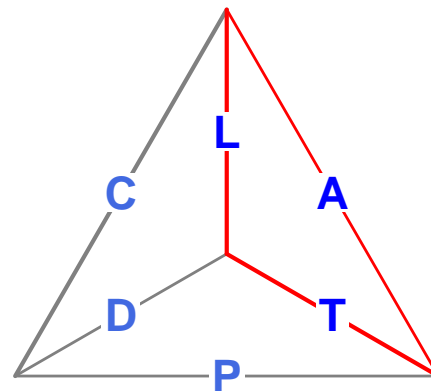
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TAL





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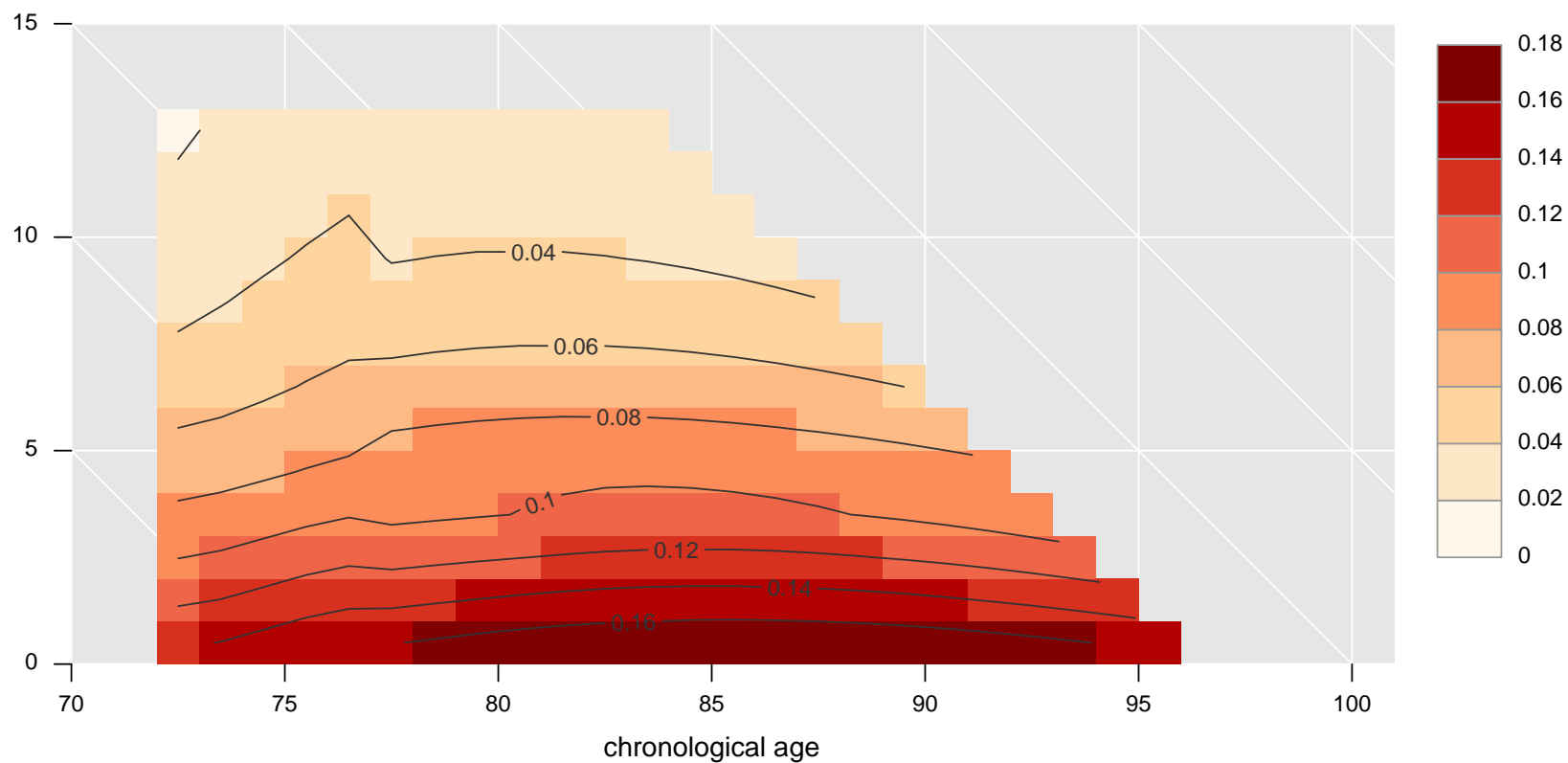


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## TAL (cohort), spotted in the wild

thanatological age





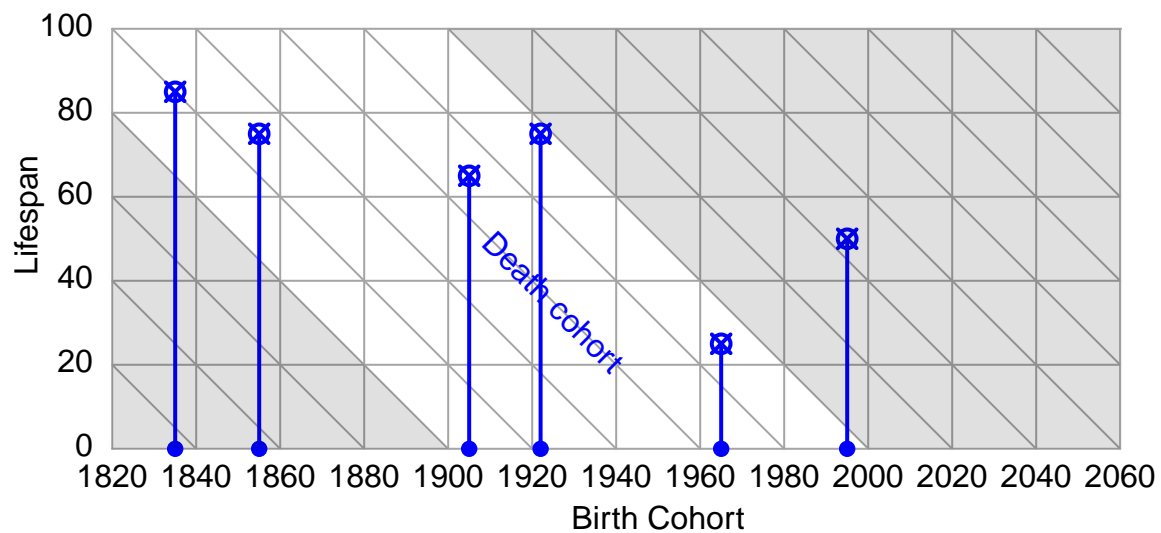
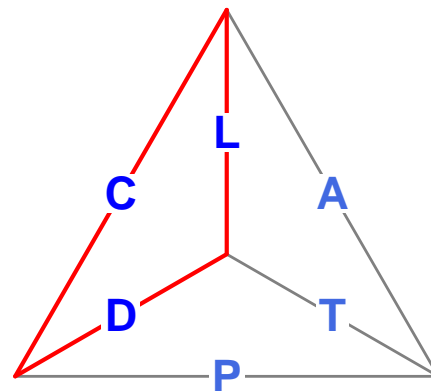
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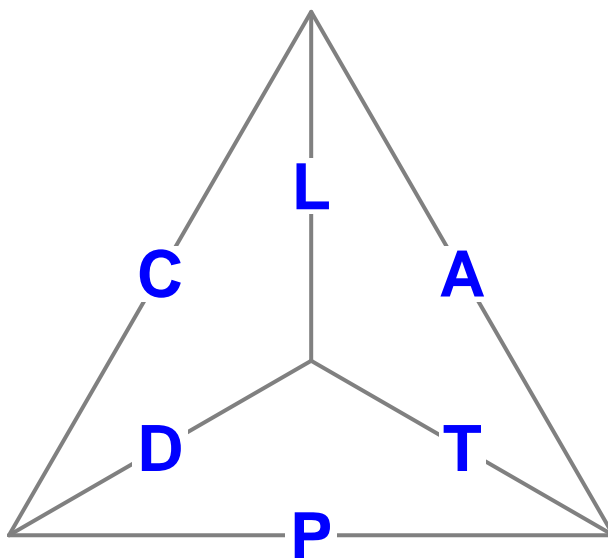


LCD





A tetrahedron joins the diagrams





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# All diagrams combined (right angles)

Using right-angles (interactive, web):<sup>1</sup>

<http://demog.berkeley.edu/~triffe/RGL1/>

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<sup>1</sup>assuming we have good internet...



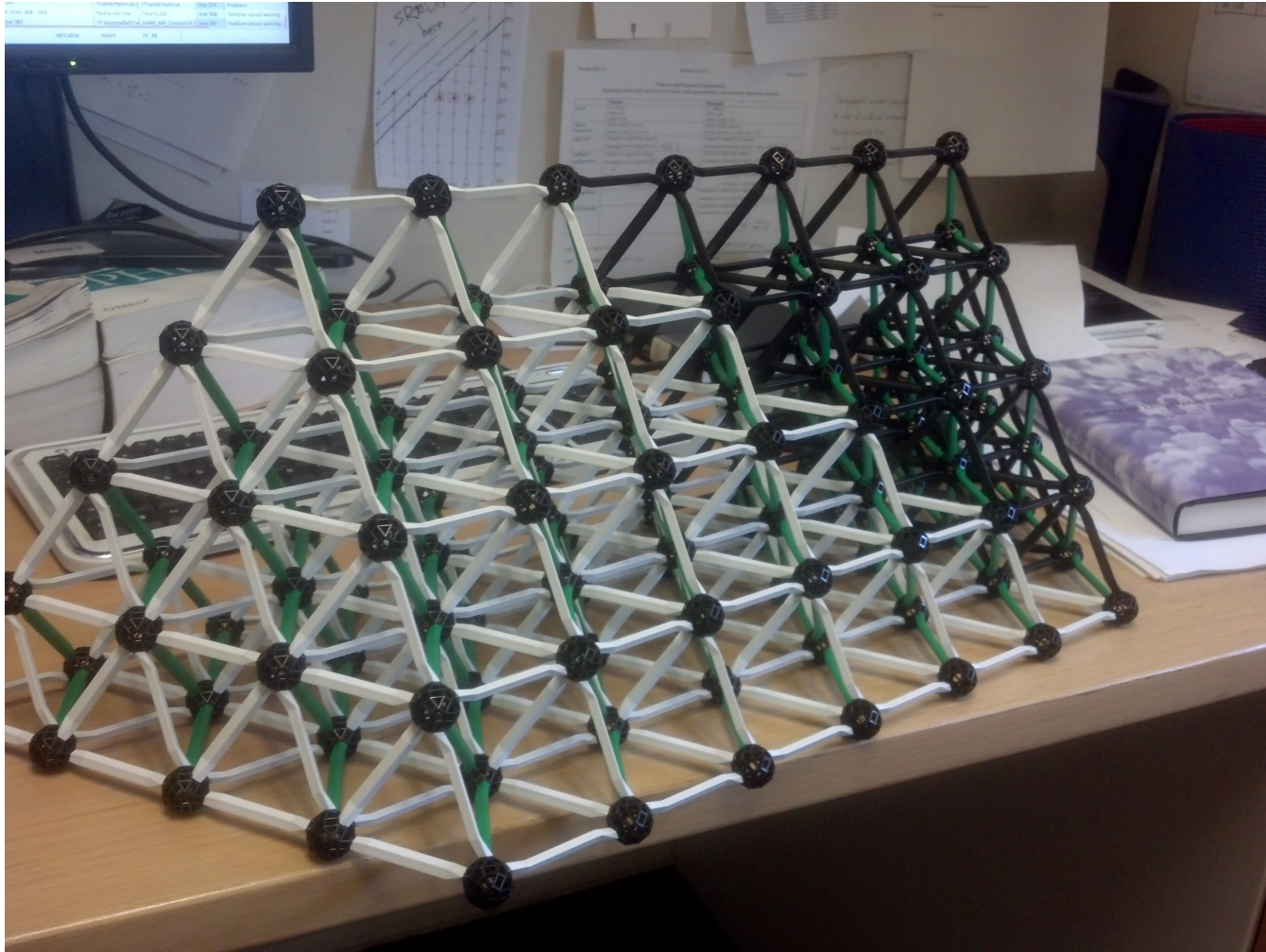
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As a regular honeycomb<sup>2</sup>



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<sup>2</sup>sorry, it doesn't fit in my suitcase



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- A memorable and fun-to-derive geometric identity
- but what is it for?
- Late-life morbidity measurement and prediction.





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**Comments or Questions?**  
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