Intrinsically Straight

Parallelism

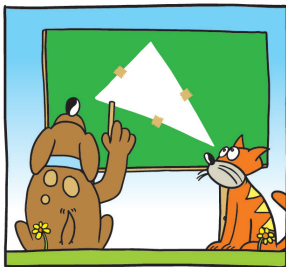**Parallel lines have so much in common**

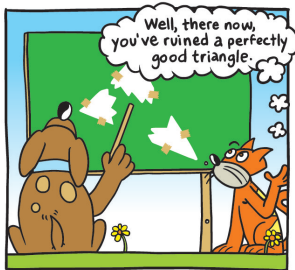**it's a shame they'll never meet**
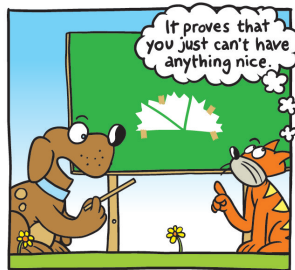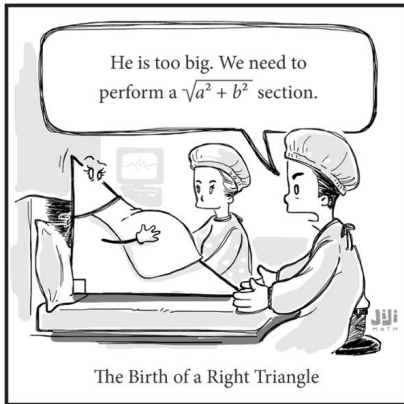
asapscience / Tumblr

Triangle Angle Sum

"Start with any triangle."

"Tear off the angles. You can always rearrange the angles so that they form a straight line."

"What does that prove?"

Pythagorean Theorem

1. Which did you find most compelling for why great circles are intrinsically straight and shortest distance paths?

  a) string pulled tightly
  b) masking tape
  c) toy car
  d) symmetry
  e) other

1. Which did you find most compelling for why great circles are intrinsically straight and shortest distance paths?

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2. Which were arguments related to parallelism?

a) If the definition of parallel is intrinsically straight paths that never meet, then there are no parallels on the sphere
b) If the definition of parallel is paths that never meet, then there are parallels on the sphere
c) both of the above

3. Sketch a picture related to angle sum of the earth and summarize what it shows.

4. Which were arguments related to the Pythagorean theorem possibly being false?

a) *Futurama* says so

b) Because we can create the two base sides *a* and *b* with string, flatten and create c_{flat}, and put it back on the sphere to see that it is too long, ie: $a^2 + b^2 = c_{flat}^2 > c_{sphere}^2$

c) both of the above

d) none of the above, because the Pythagorean theorem holds on the sphere

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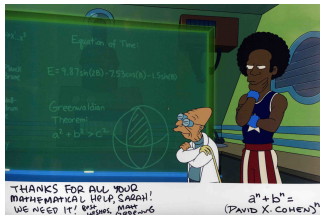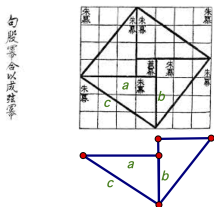
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