

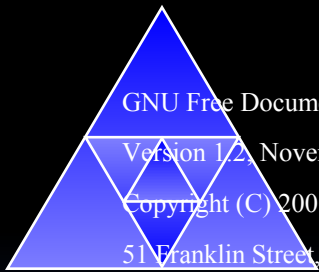
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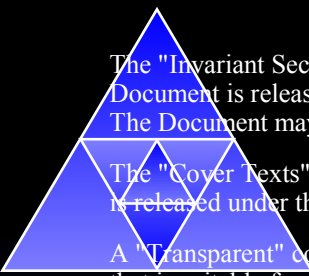
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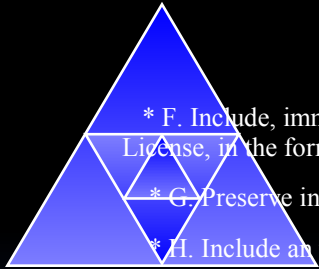
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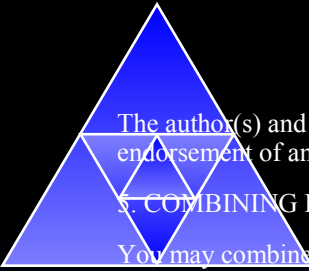
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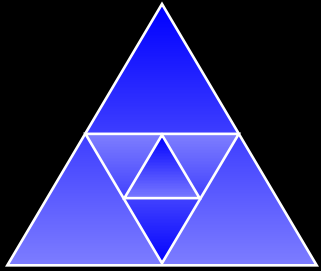
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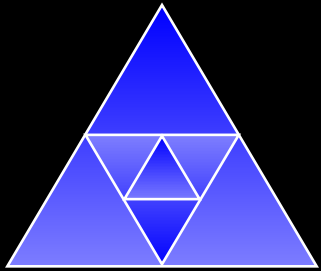
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# Beauty and Harmony through Mathematics

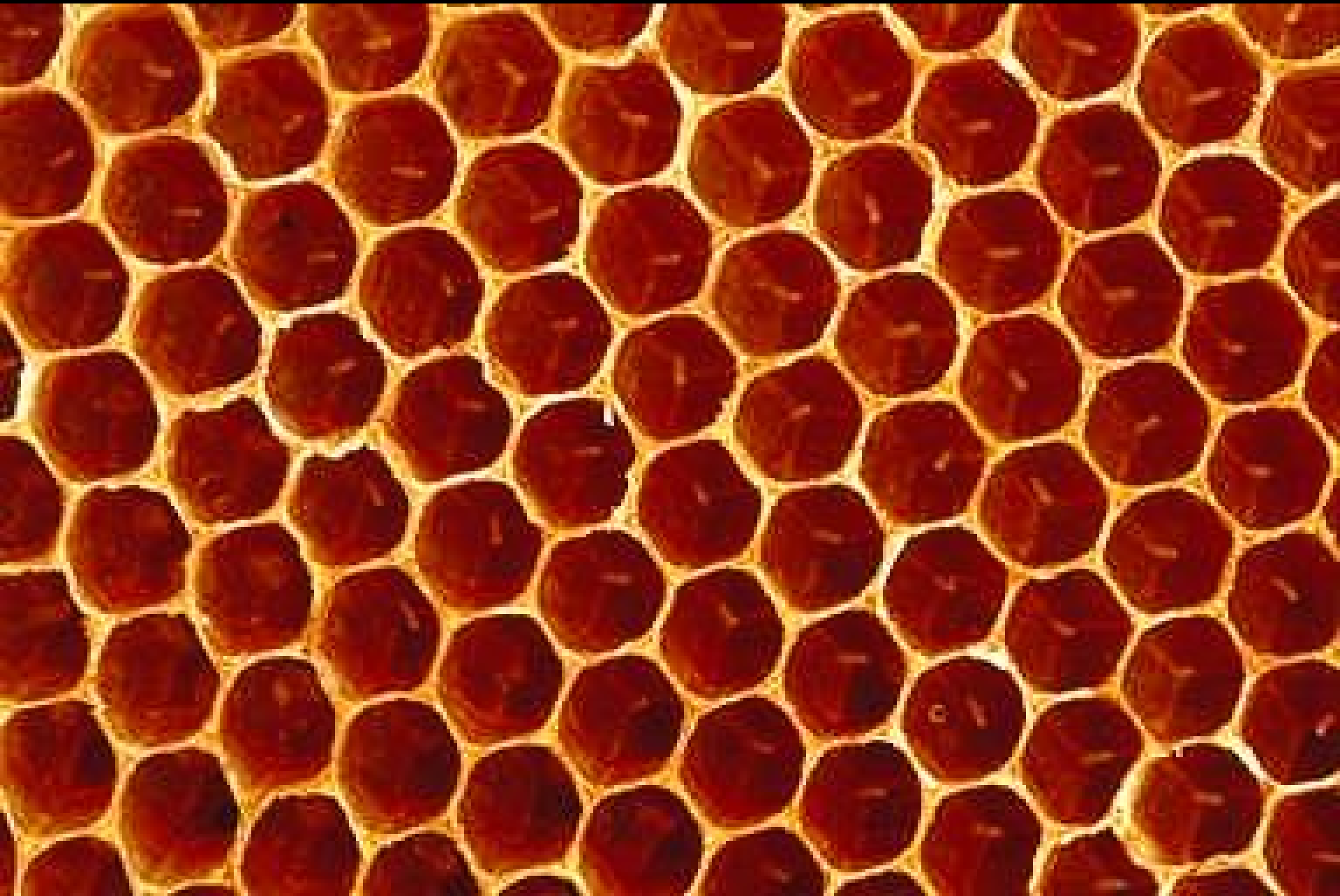
Vern Poythress



## Theme: God's Wisdom

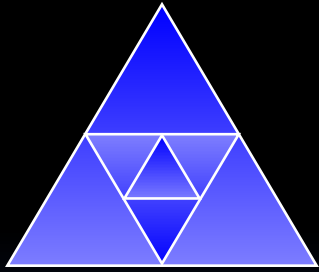
The LORD by wisdom founded the earth;  
by understanding he established the heavens;  
by his knowledge the deeps broke open,  
and the clouds drop down the dew.

--Proverbs 3:19-20









# Newton's Law of Gravitation

proportion:  
gravitational constant

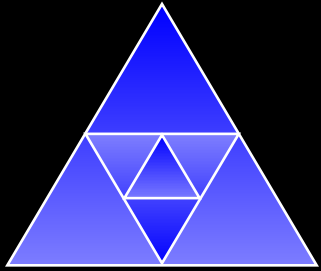
proportion:  
mass of earth

$$F = \frac{GMm}{r^2}$$

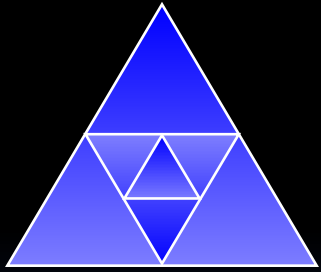
proportion:  
mass of ball

force of  
gravity

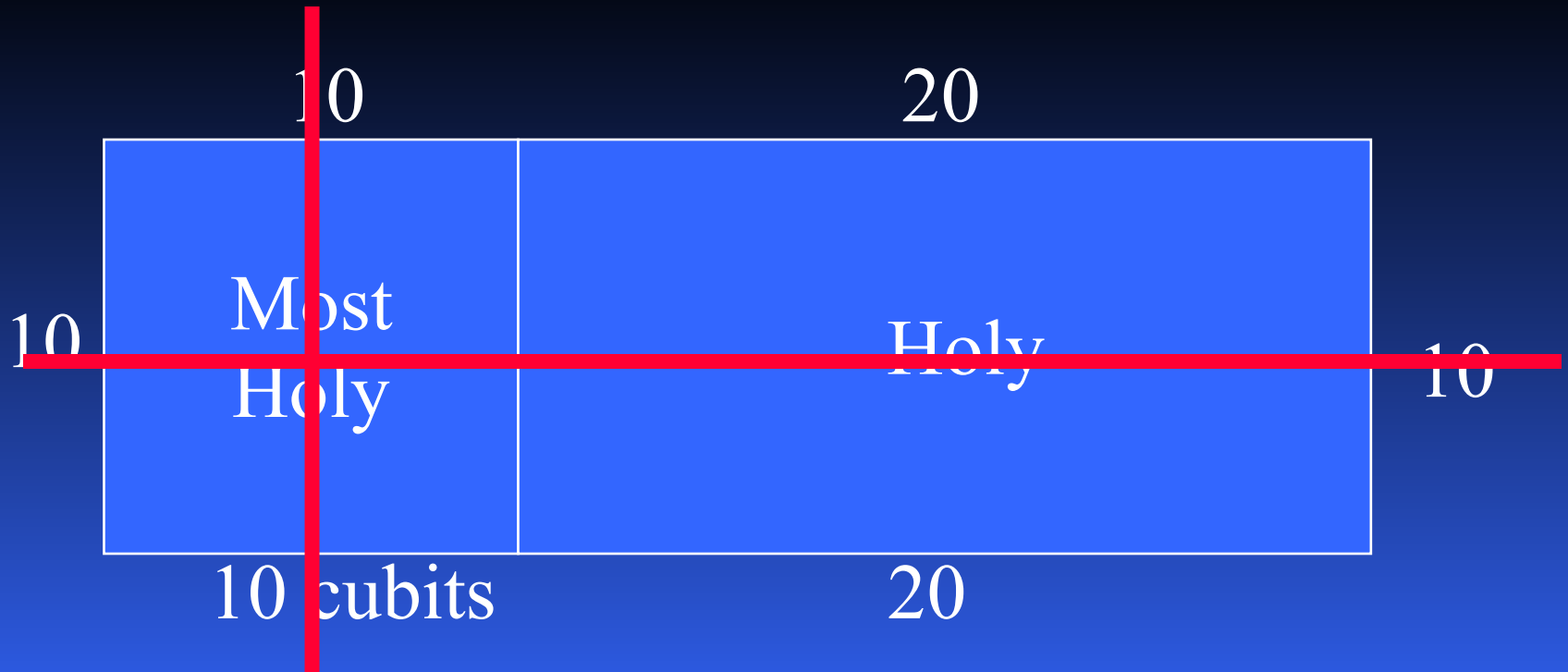
proportion:  
distance



*Symmetry*

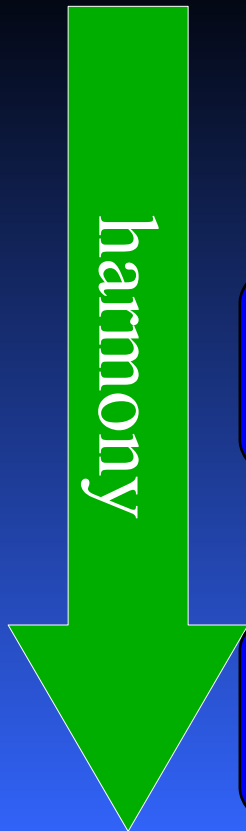
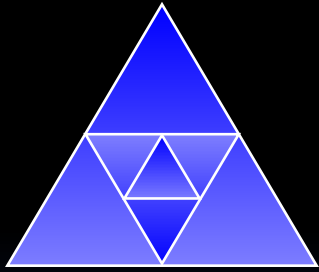


# Symmetry in the Tabernacle

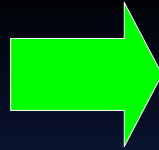




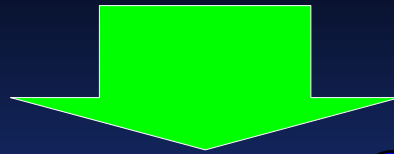
# Origin of Symmetry: Love



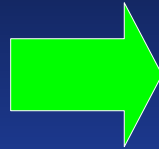
Father



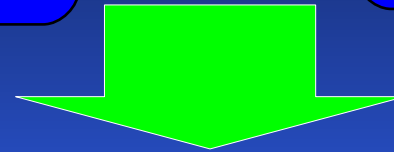
Son, as Image



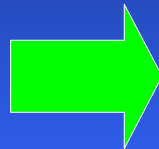
Father's  
perspective



Son's  
perspective

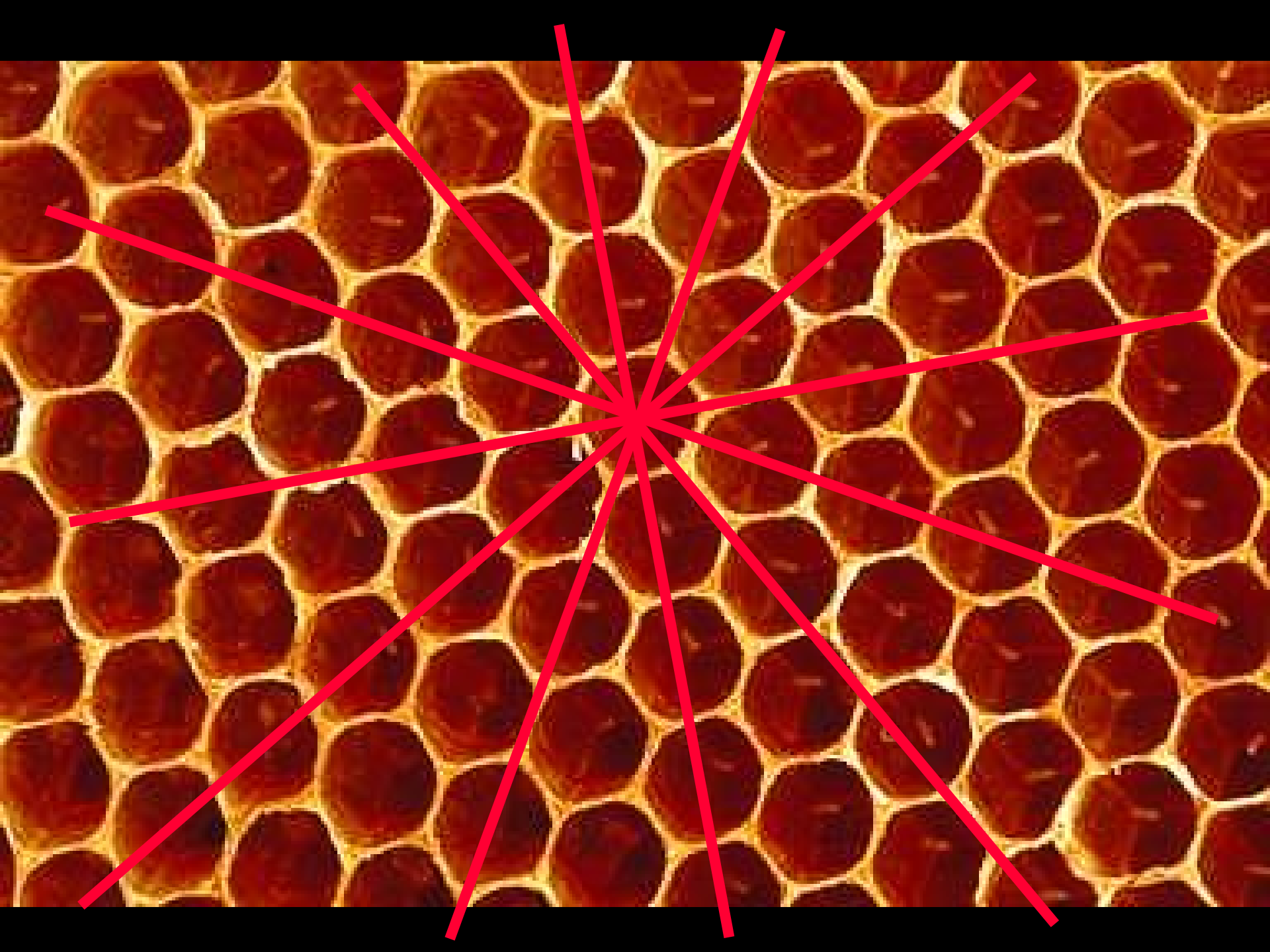


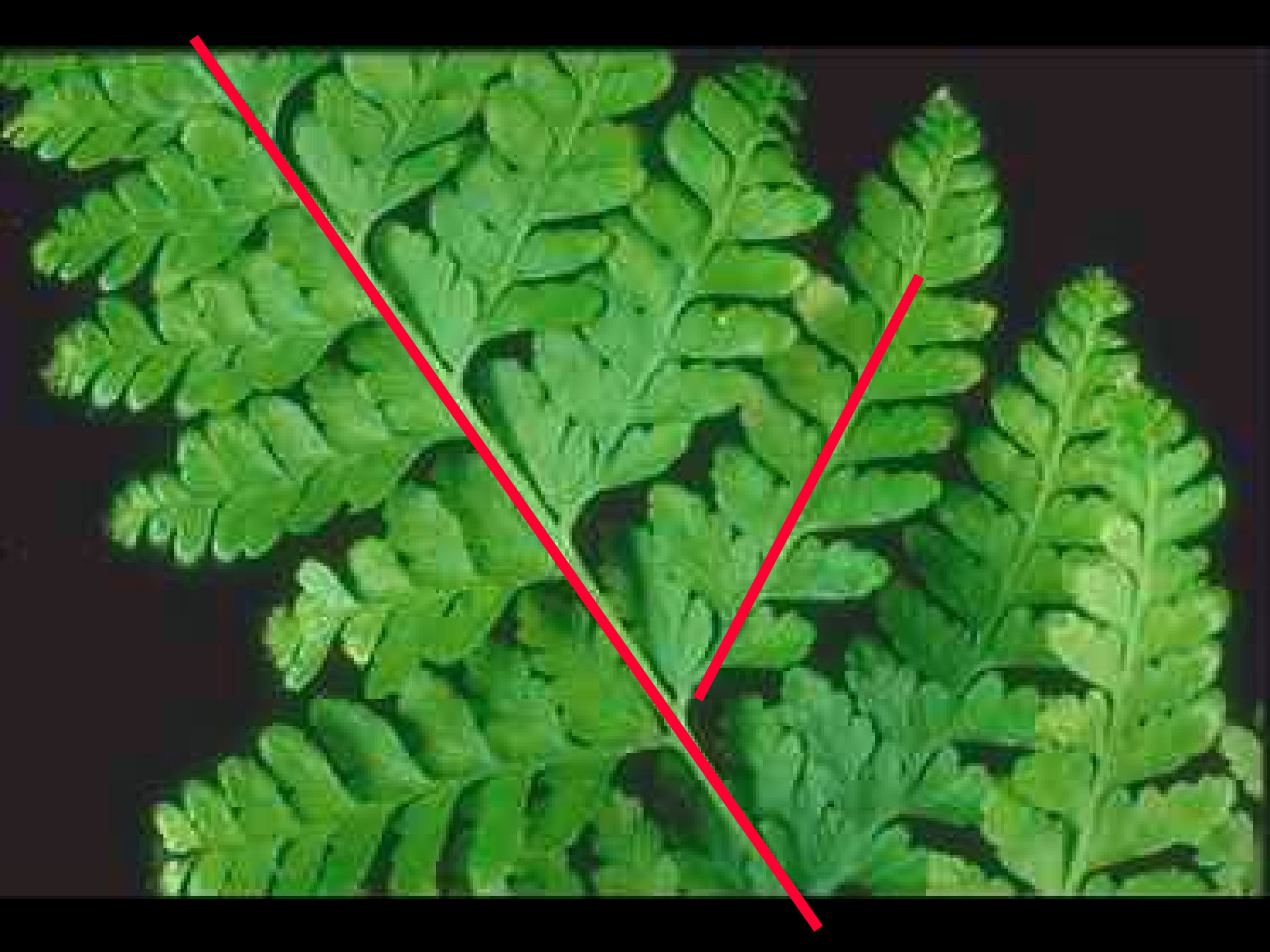
my  
perspective

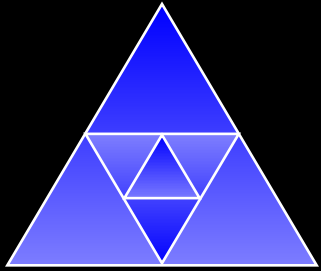


your  
perspective

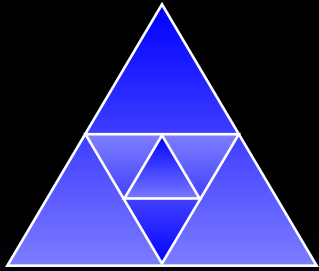




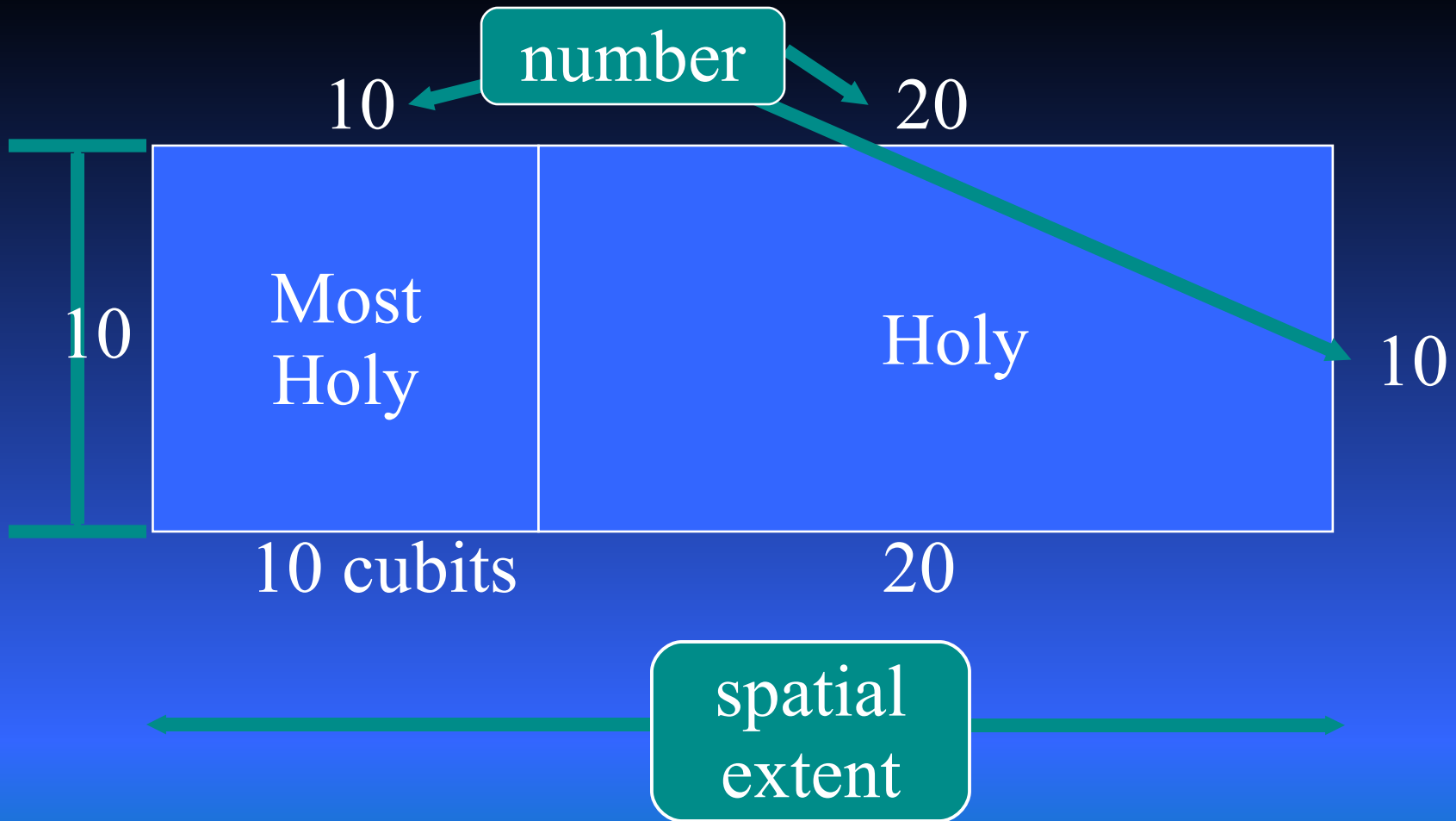


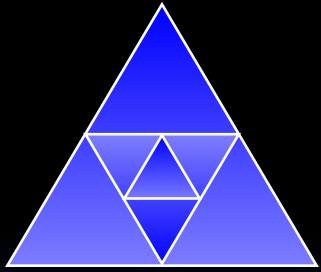


# Space and Number

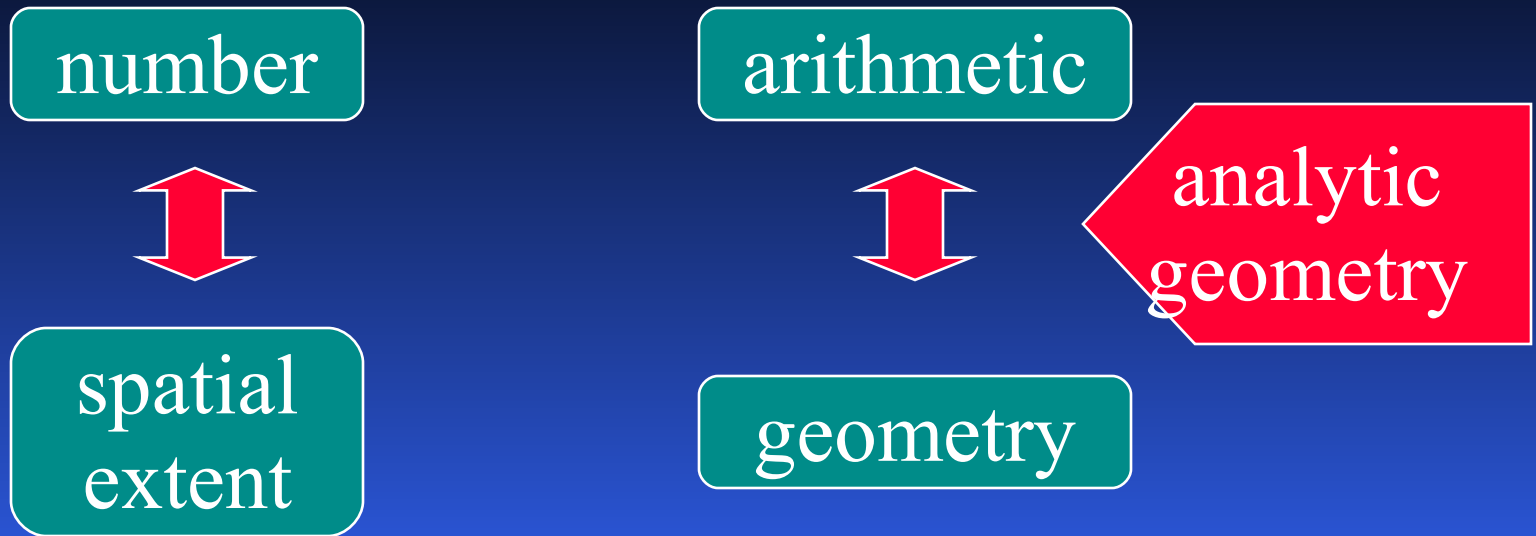


# Space in the Tabernacle

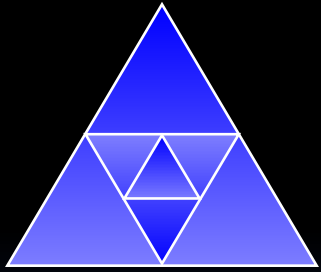




# Correlation and Analogy



God establishes coherence.  
One is "image" of the other.



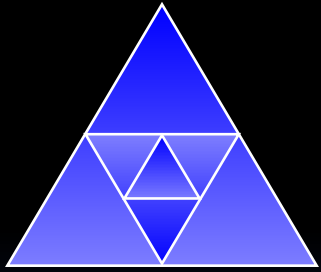
# Symmetry in Arithmetic

$$5 + 3 = 8$$



$$3 + 5 = 8$$





# Up and Down

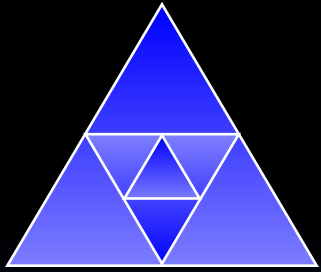
549  
30  
156  
662  
987  
808  
+ 235  

---



or



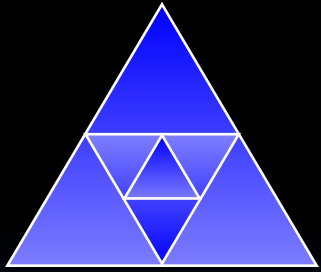


# Symmetry in Multiplication

$$5 \times 3 = 15$$



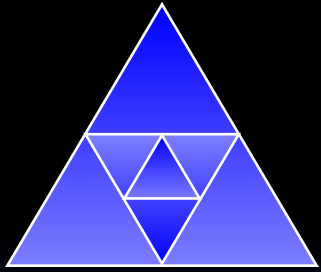
$$3 \times 5 = 15$$



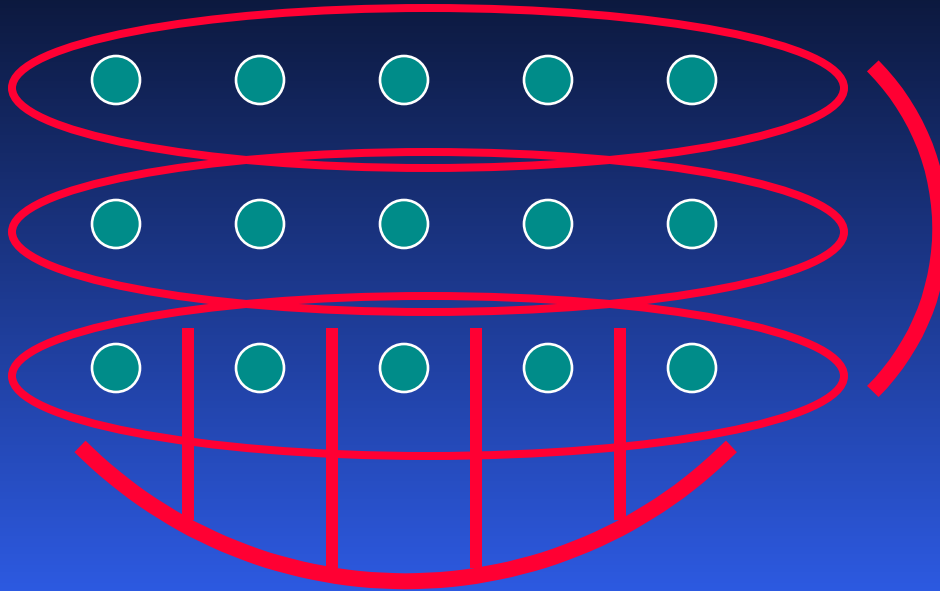
Why?

$$5 \times 3 = 3 + 3 + 3 + 3 + 3$$

$$3 \times 5 = 5 + 5 + 5$$

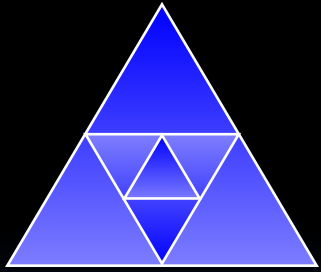


# Spatial Solution



3 groups of 5:  
 $3 \times 5$

5 groups of 3:  
 $5 \times 3$



# Proportions

$$0 \times 5 = 0$$

$$1 \times 5 = 5$$

$$2 \times 5 = 10$$

$$3 \times 5 = 15$$

$$4 \times 5 = 20$$

$$5 \times 5 = 25$$

$$6 \times 5 = 30$$

$$7 \times 5 = 35$$

$$8 \times 5 = 40$$

$$9 \times 5 = 45$$



$$0 \times 50 = 0$$

$$1 \times 50 = 50$$

$$2 \times 50 = 100$$

$$3 \times 50 = 150$$

$$4 \times 50 = 200$$

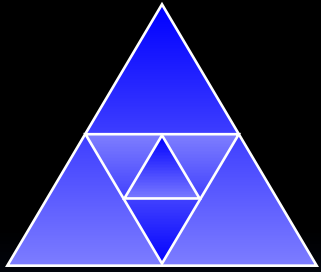
$$5 \times 50 = 250$$

$$6 \times 50 = 300$$

$$7 \times 50 = 350$$

$$8 \times 50 = 400$$

$$9 \times 50 = 450$$



# Held in Christ

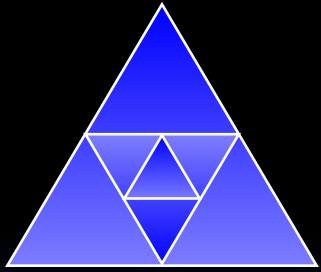
number



spatial  
extent

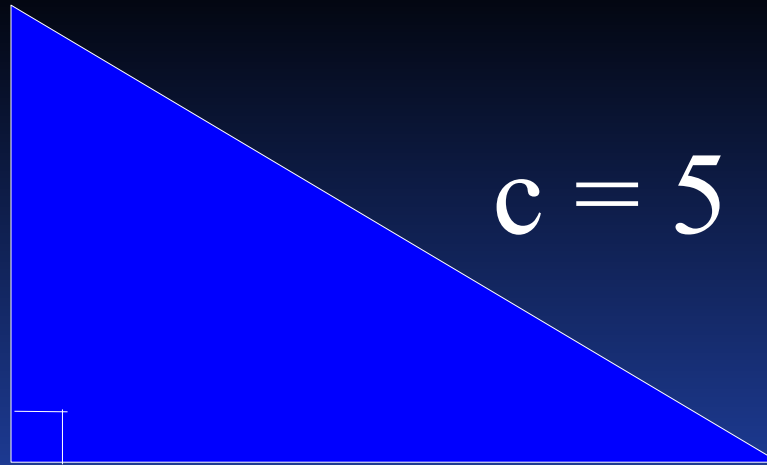
God establishes coherence.  
One is "image" of the other.

Coherence in Christ,  
the Word of God



# Pythagorean Theorem

$$a = 3$$

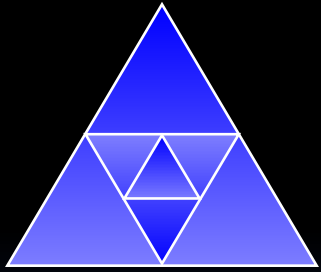


$$b = 4$$

$$c = 5$$

$$3^2 + 4^2 = 5^2$$

$$a^2 + b^2 = c^2$$



# Coherence of Space and Number

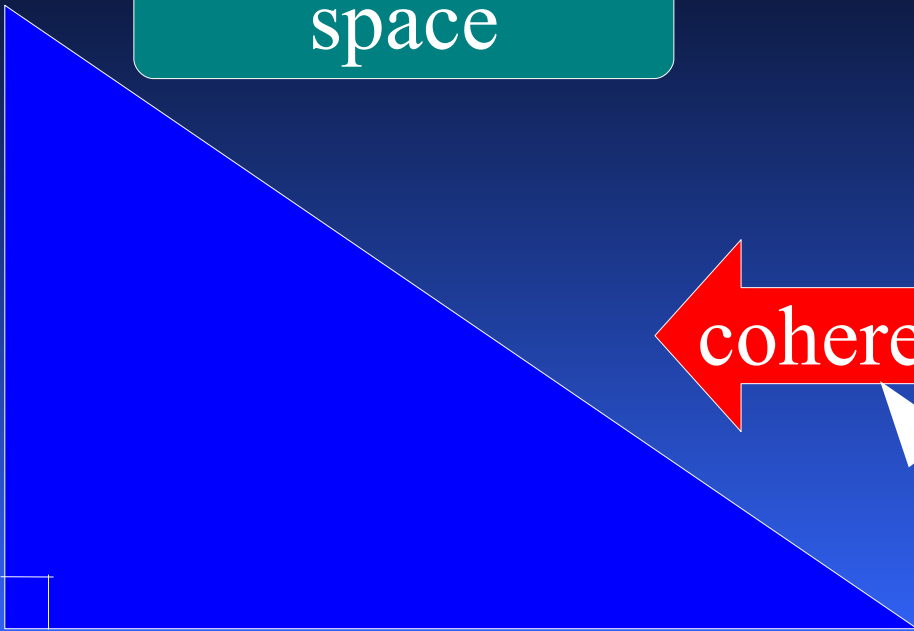
space

number

coherence

$$3^2 + 4^2 = 5^2$$

Harmony of God's  
mind, in Christ  
the wisdom of God

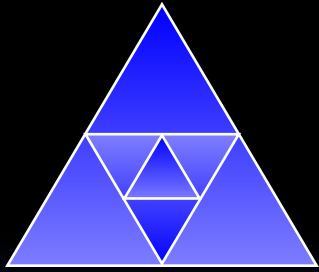






# "symmetry" of Father and Son

## Atomic Structure



nucleus

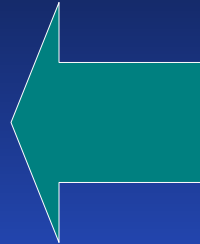
electrons

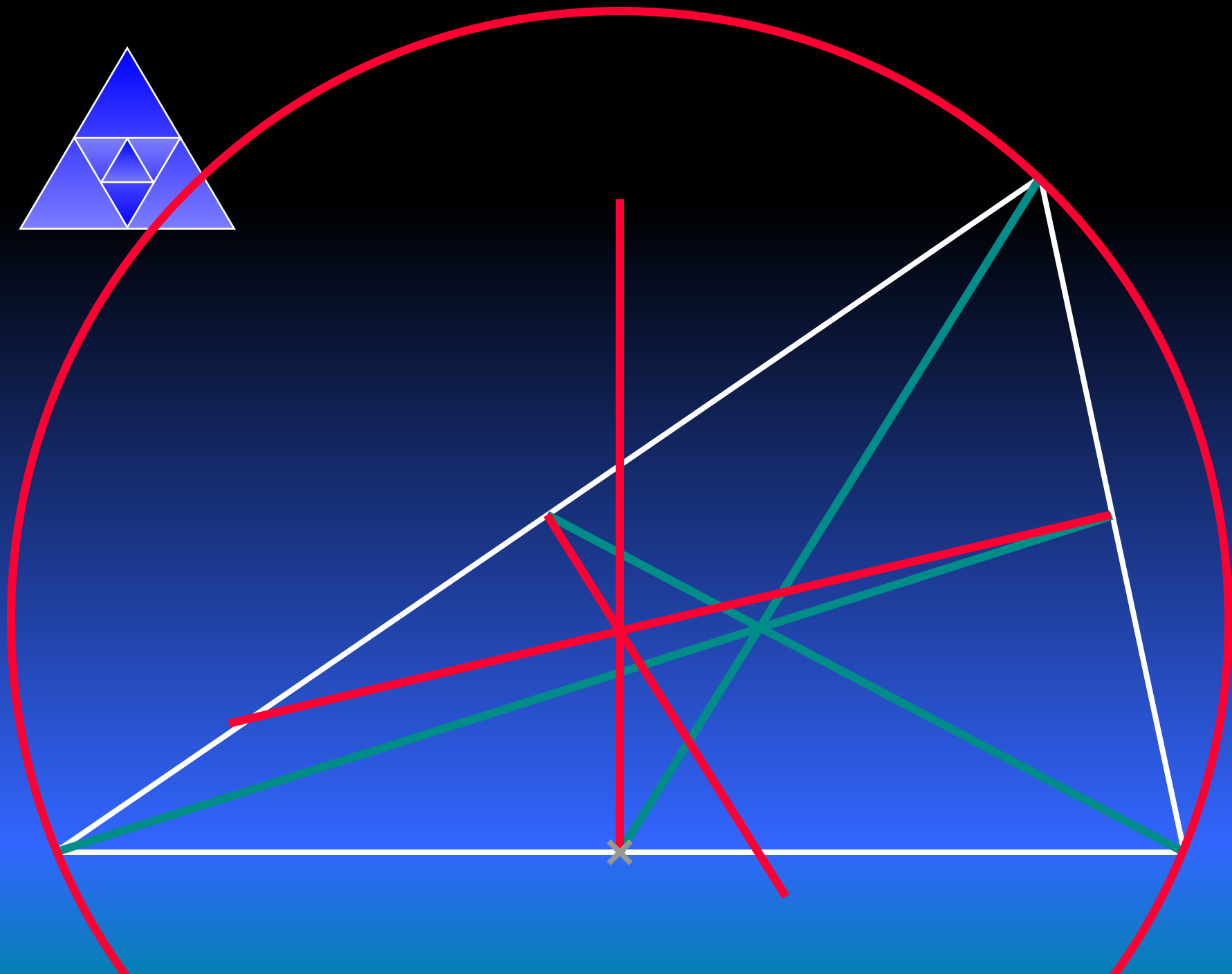
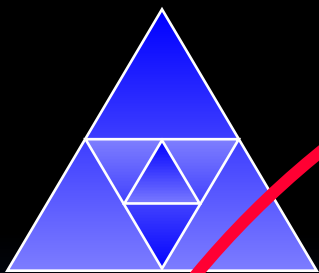
spherical  
symmetry

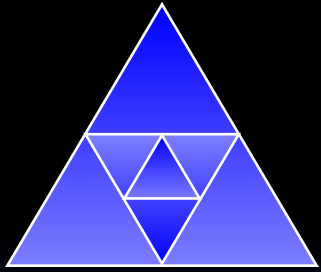
QM

symmetric  
theory

electron shells, differentiating  
chemical elements







More

James Nickel, *Mathematics: Is God Silent?*  
Rev. ed. Vallecito, CA: Ross House, 2001.  
309 pages +