



# PYTHAGORAS

— the philosopher and mathematician —

*Nick Amoscato & Karl*



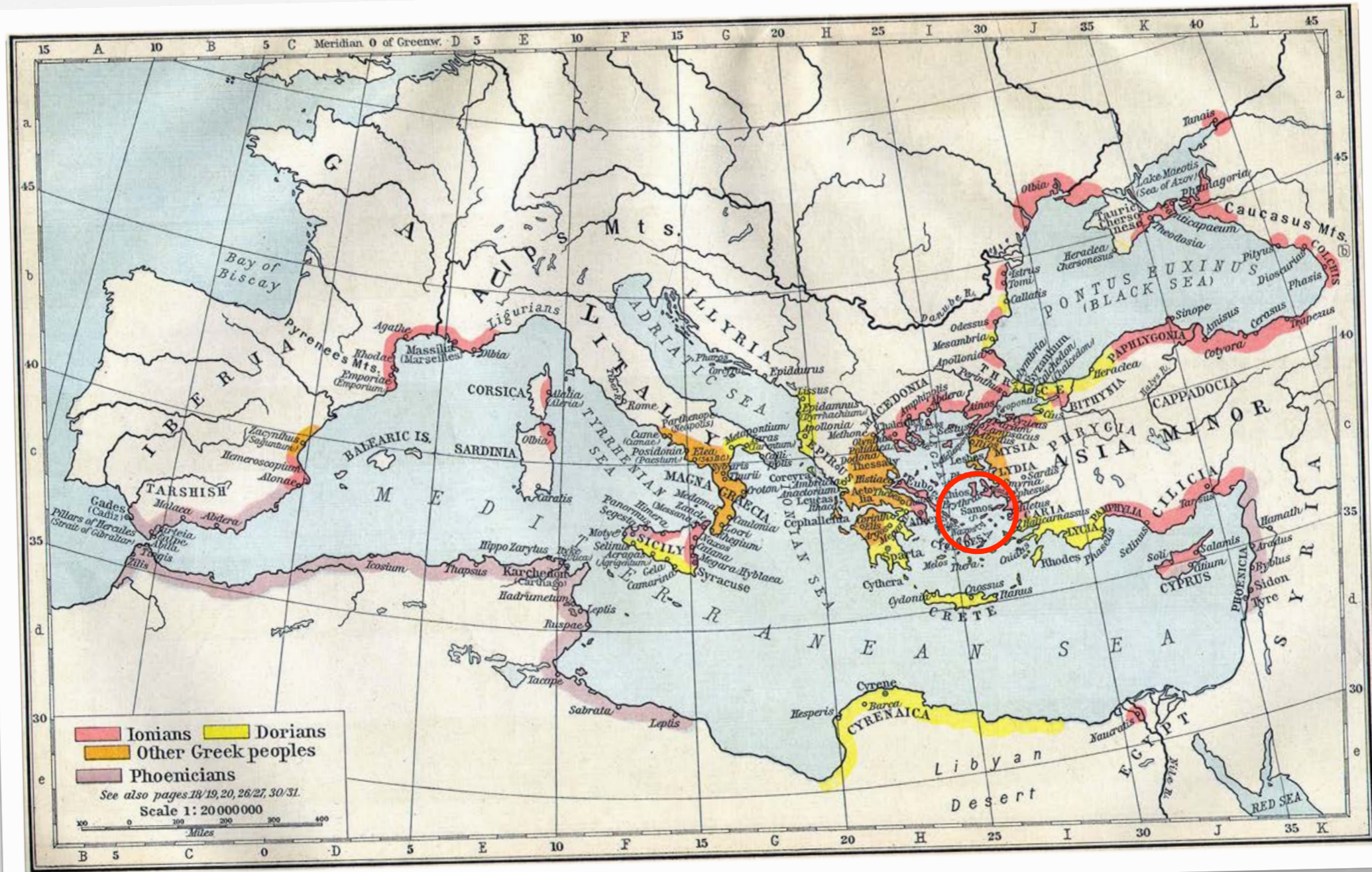


# Samos, Greece, 570 B.C.





# Samos, Greece, 570 B.C.







# LEARNING YEARS

— his teachers and mentors —



— LEARNING YEARS —

# Teachers and Mentors



— LEARNING YEARS —

# Teachers and Mentors

✿ Pherecydes

— LEARNING YEARS —

# Teachers and Mentors

- ✿ Pherecydes
- ✿ Creophylus



— LEARNING YEARS —

# Teachers and Mentors

✿ Pherecydes

✿ Creophylus

✿ Bias



— LEARNING YEARS —

# Teachers and Mentors

✿ Pherecydes

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— LEARNING YEARS —

# Teachers and Mentors

- ✿ Pherecydes
- ✿ Creophylus
- ✿ Bias
- ✿ Thales
- ✿ Anaximander



— LEARNING YEARS —

# Teachers and Mentors

- ✿ Pherecydes
- ✿ Creophylus
- ✿ Bias
- ✿ Thales
- ✿ Anaximander
- ✿ Themistoclea



# Croton 530 B.C.





# Croton 530 B.C.







# MATHEMATICS

— the first *pure* mathematician —



“ *The so-called Pythagoreans, who were the first to take up mathematics, not only advanced this subject, but saturated with it, they fancied that the principles of mathematics were the principles of all things.*

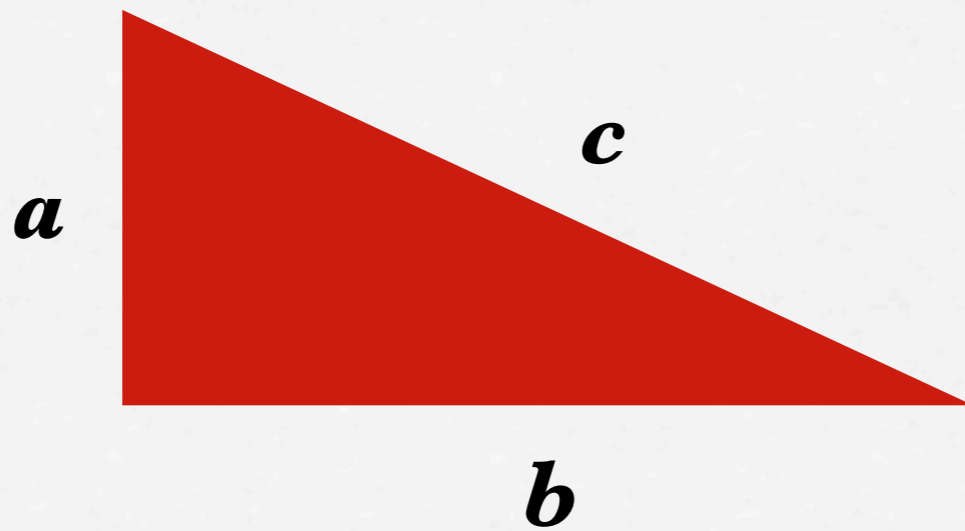
— ARISTOTLE



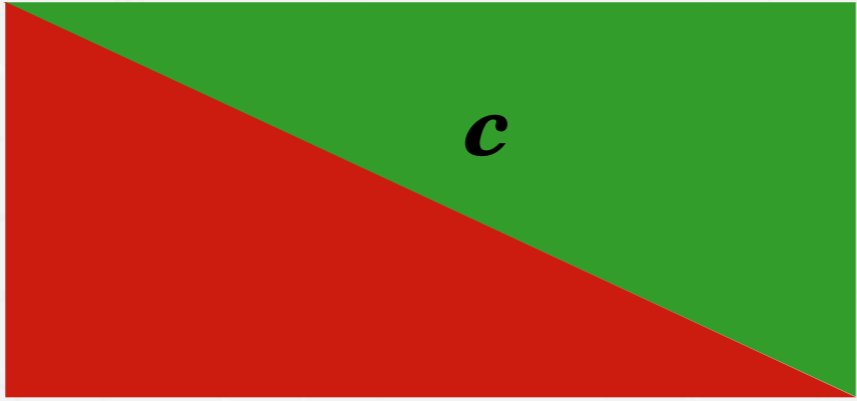
— MATHEMATICS —

# Pythagorean Theorem









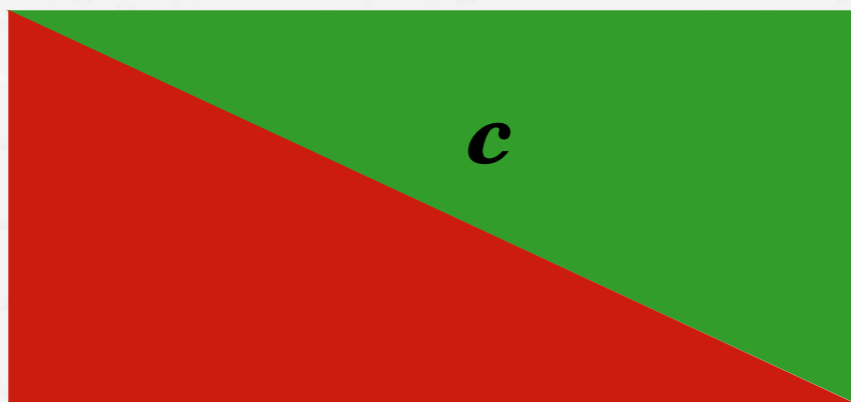
*a*

*c*

*b*



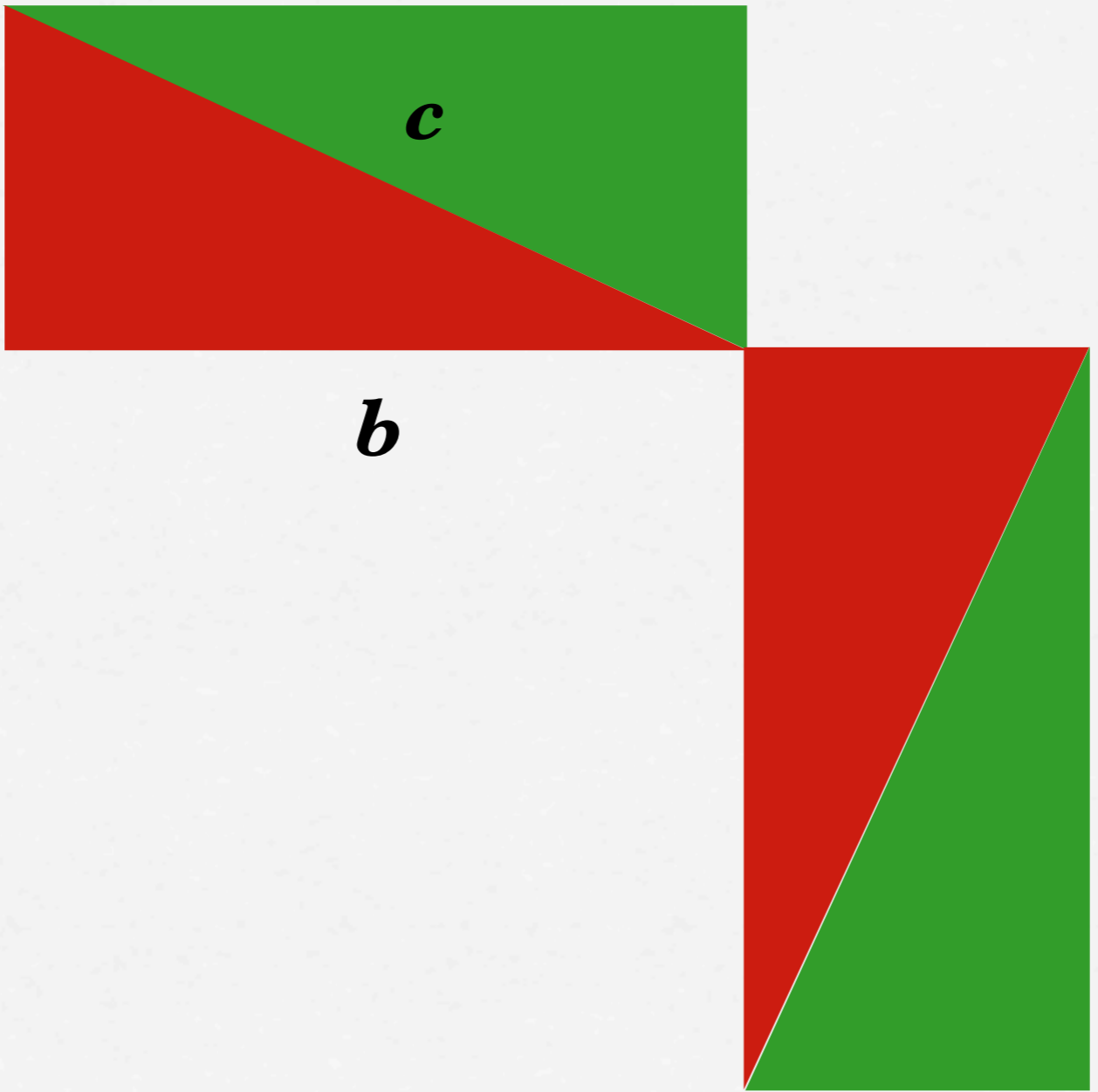
*a*



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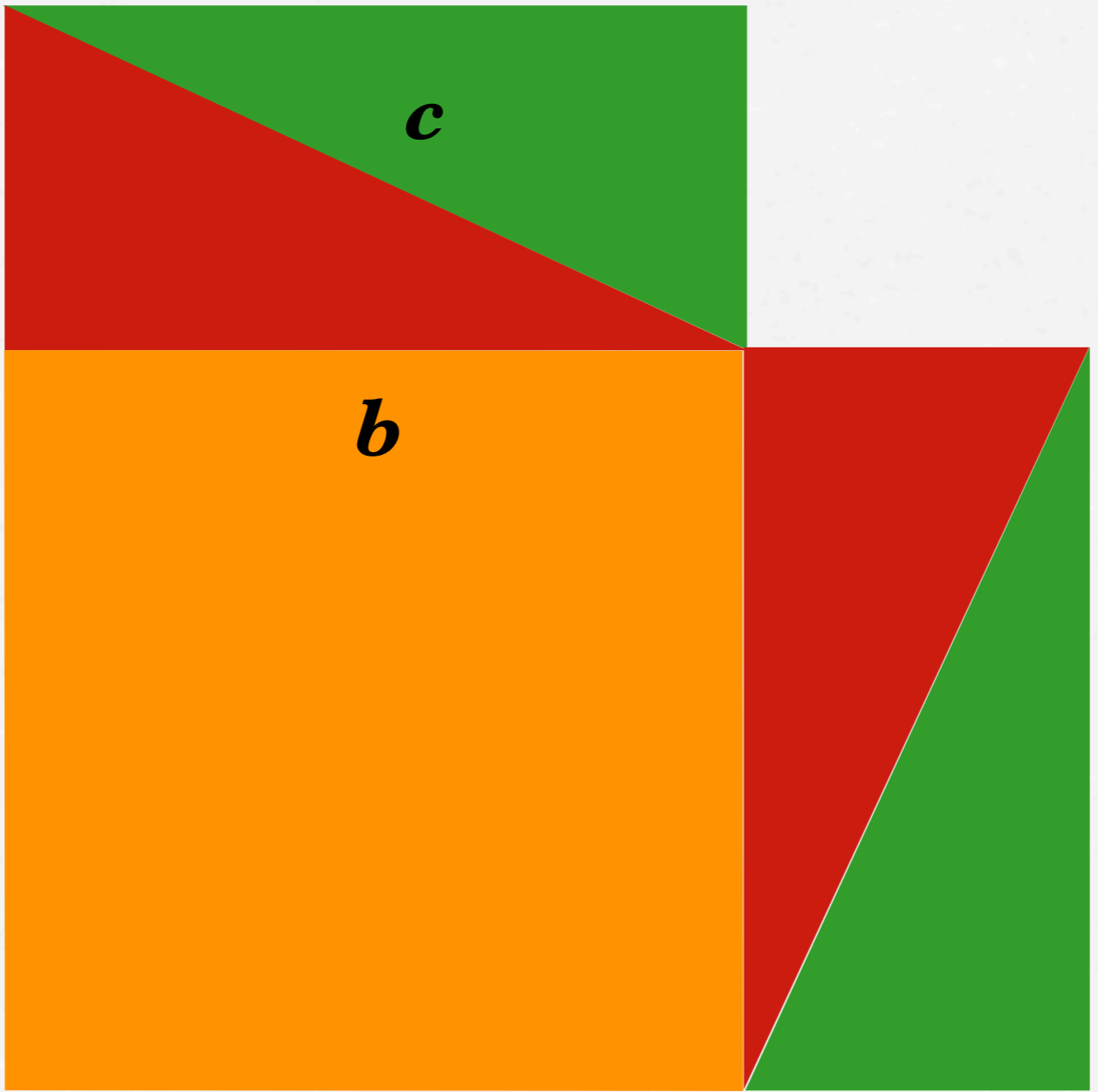


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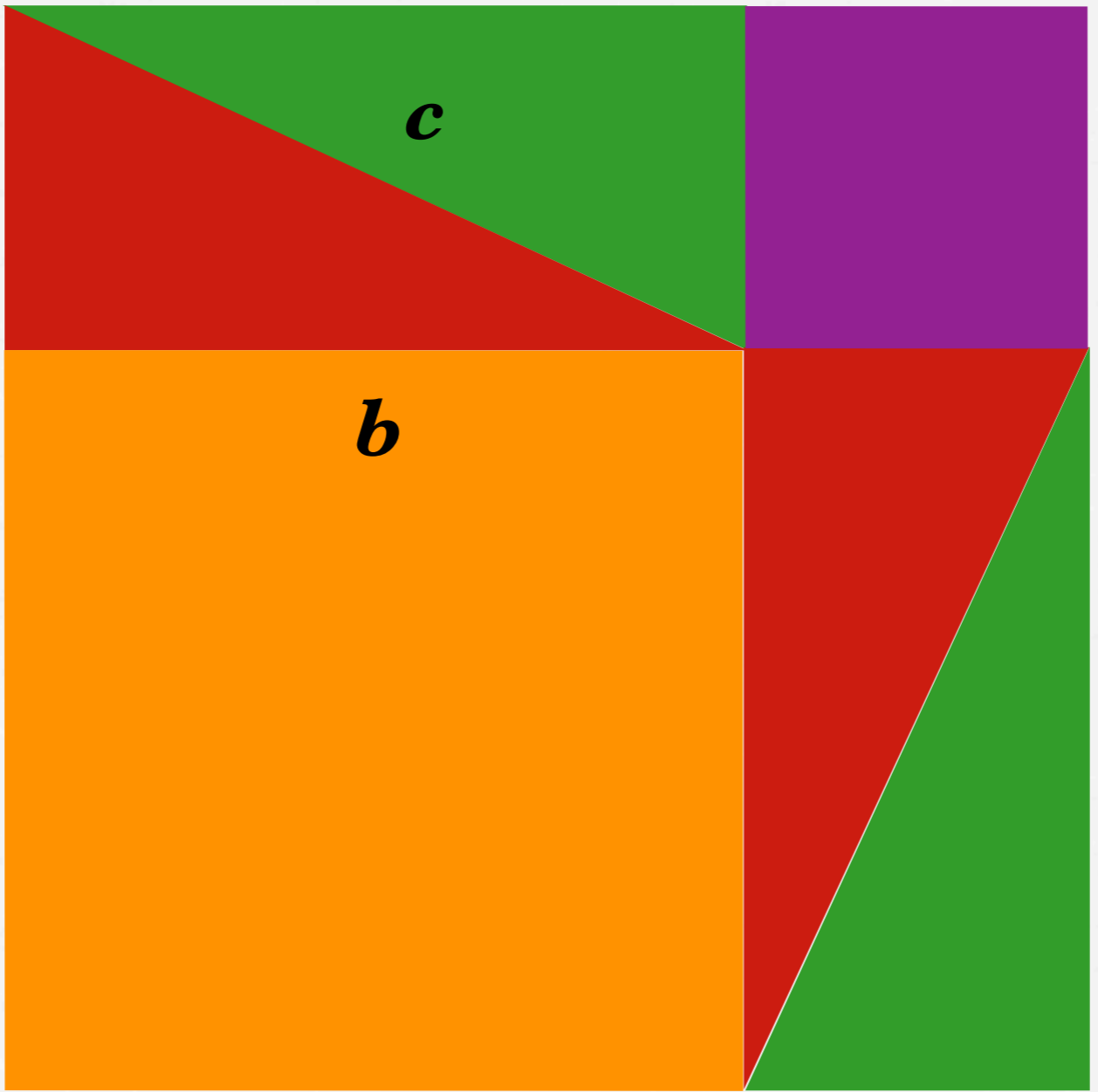
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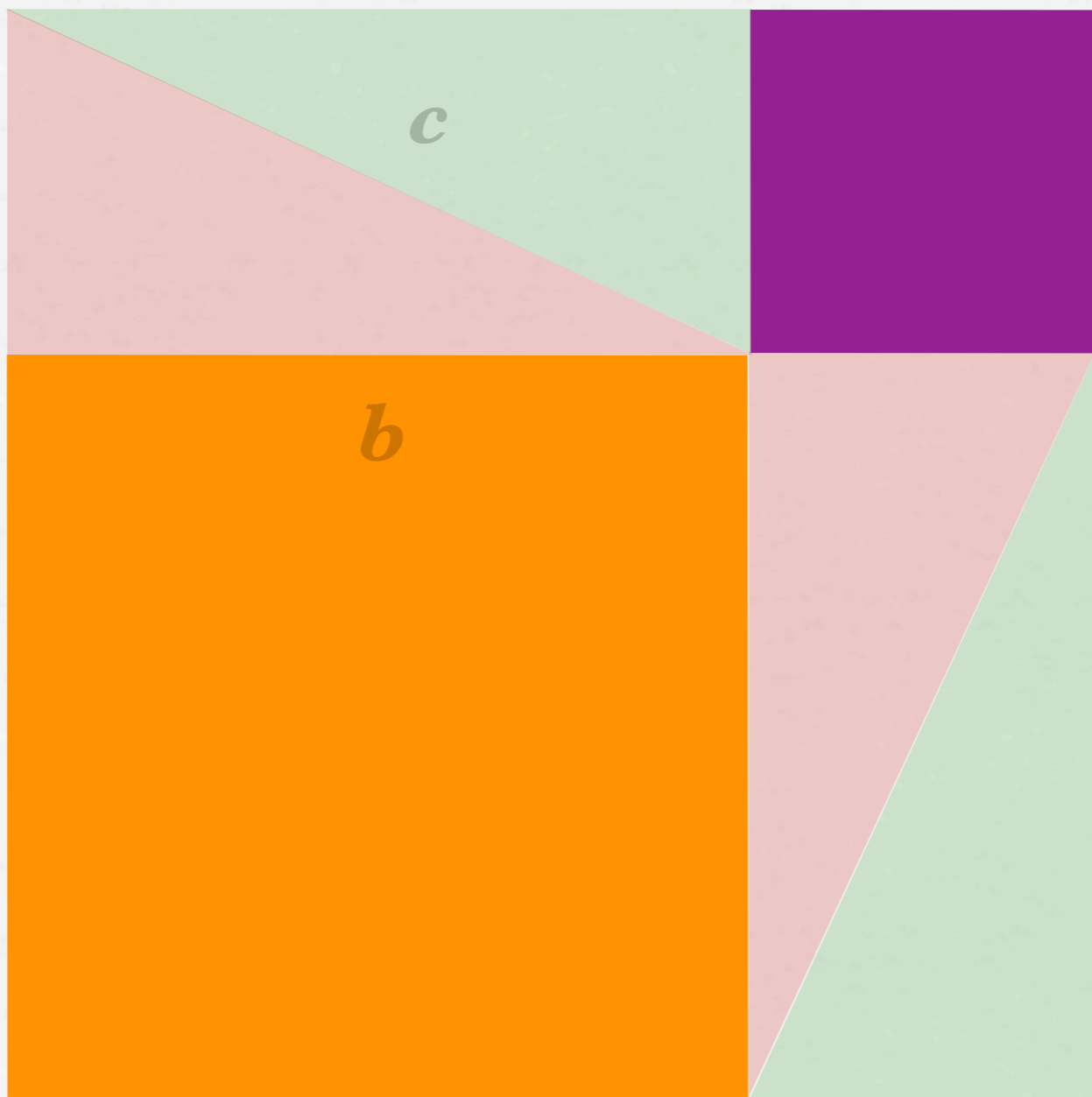


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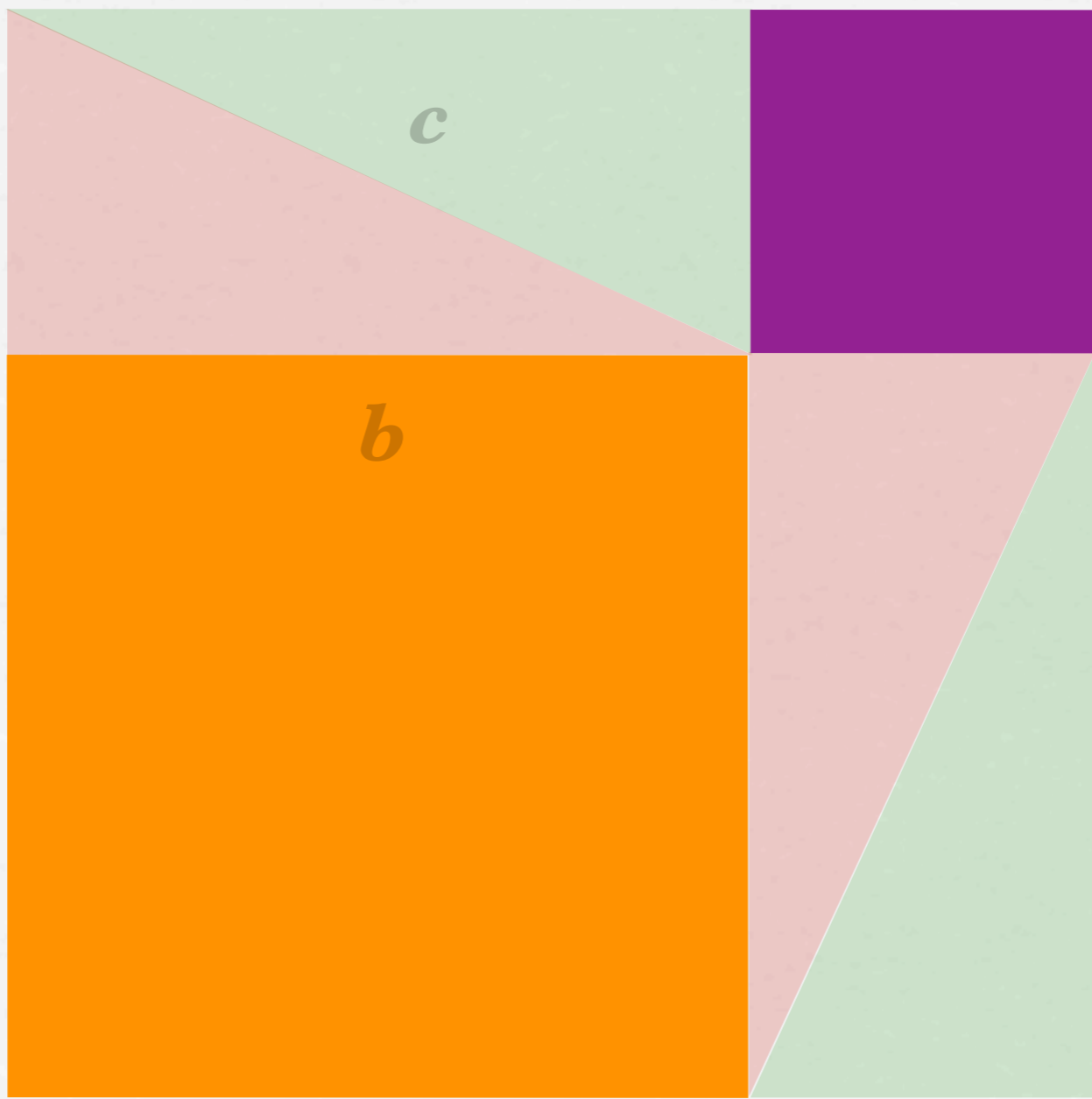
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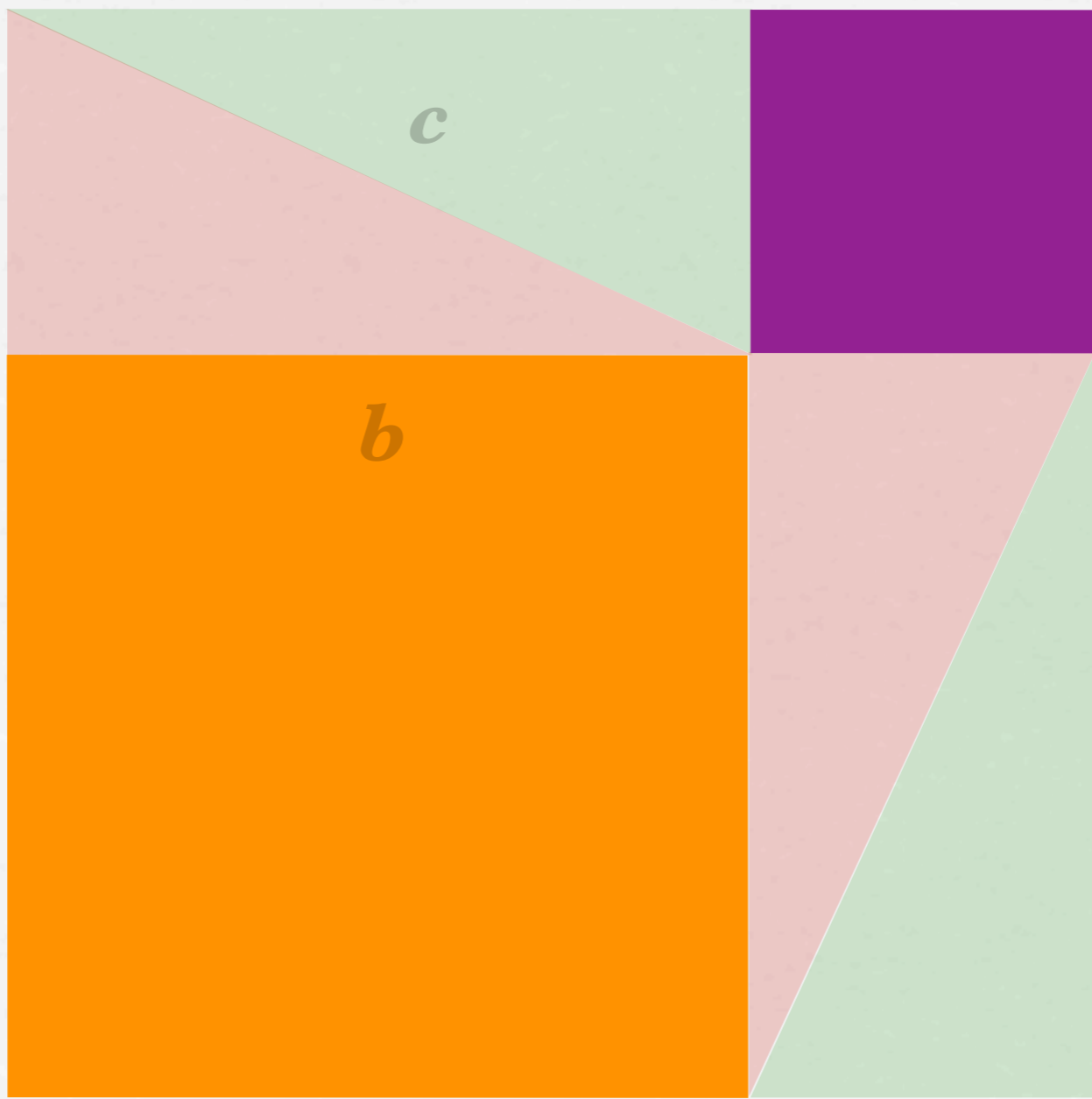
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$b$

$b$

$b$





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$a$

$c$

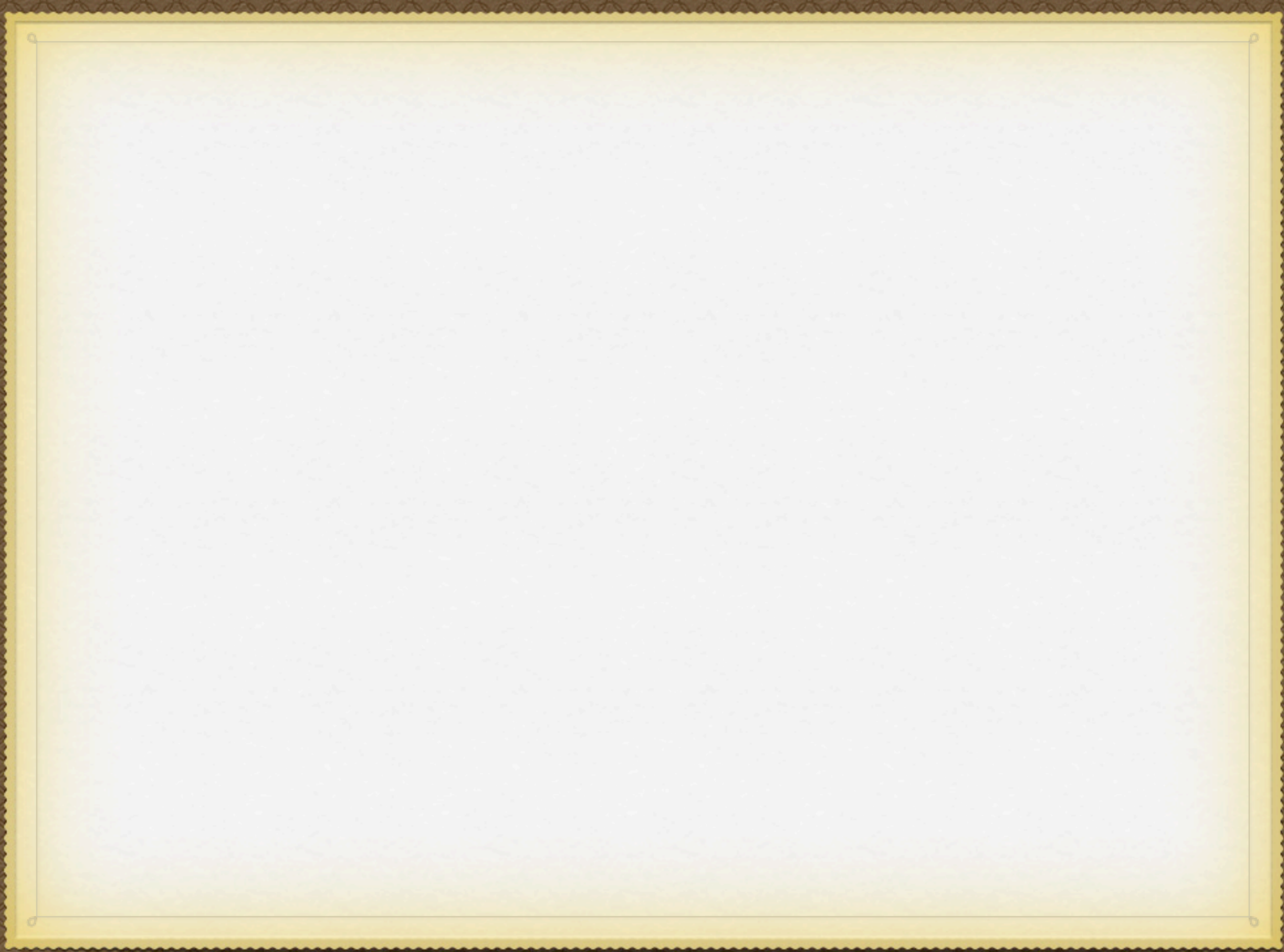
$a$

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$b$

$b$



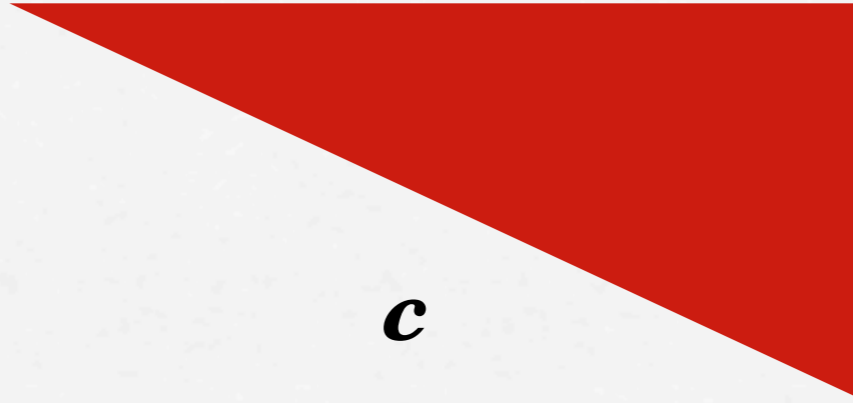




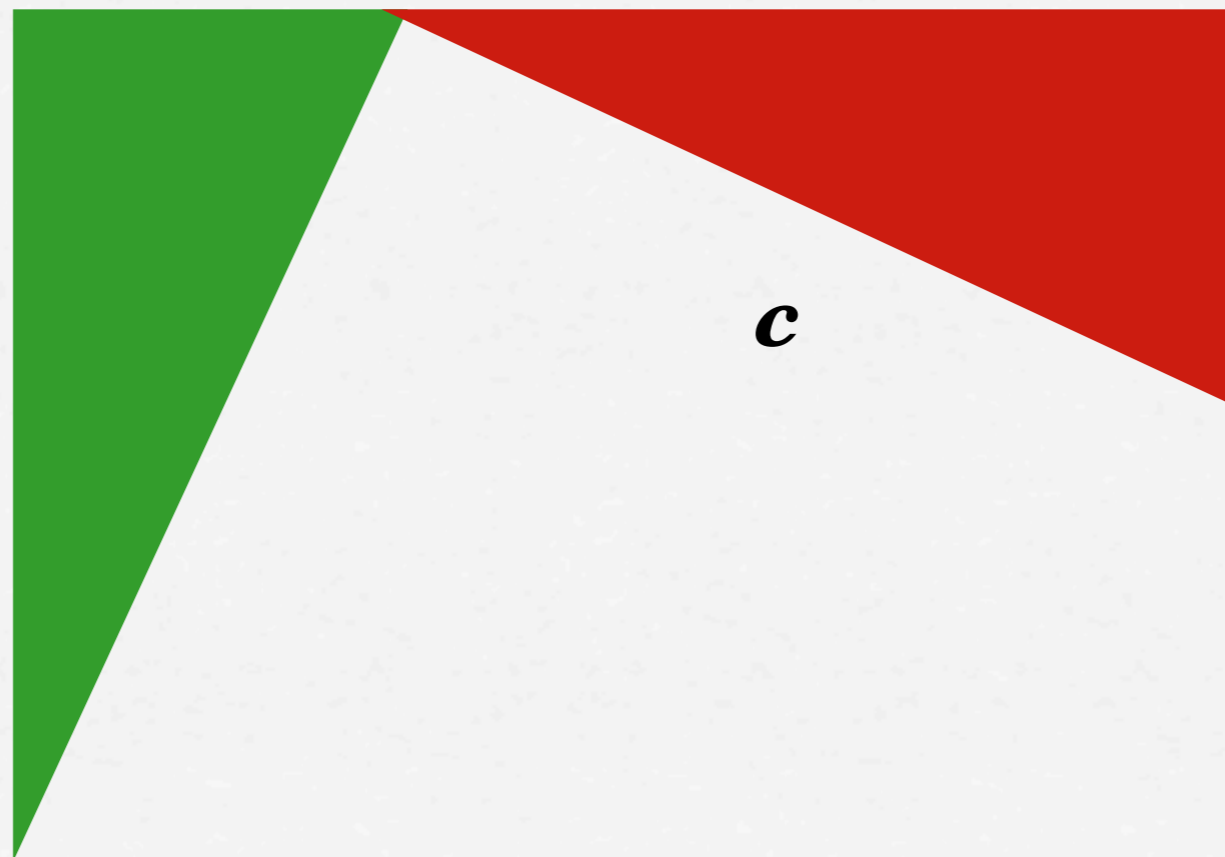
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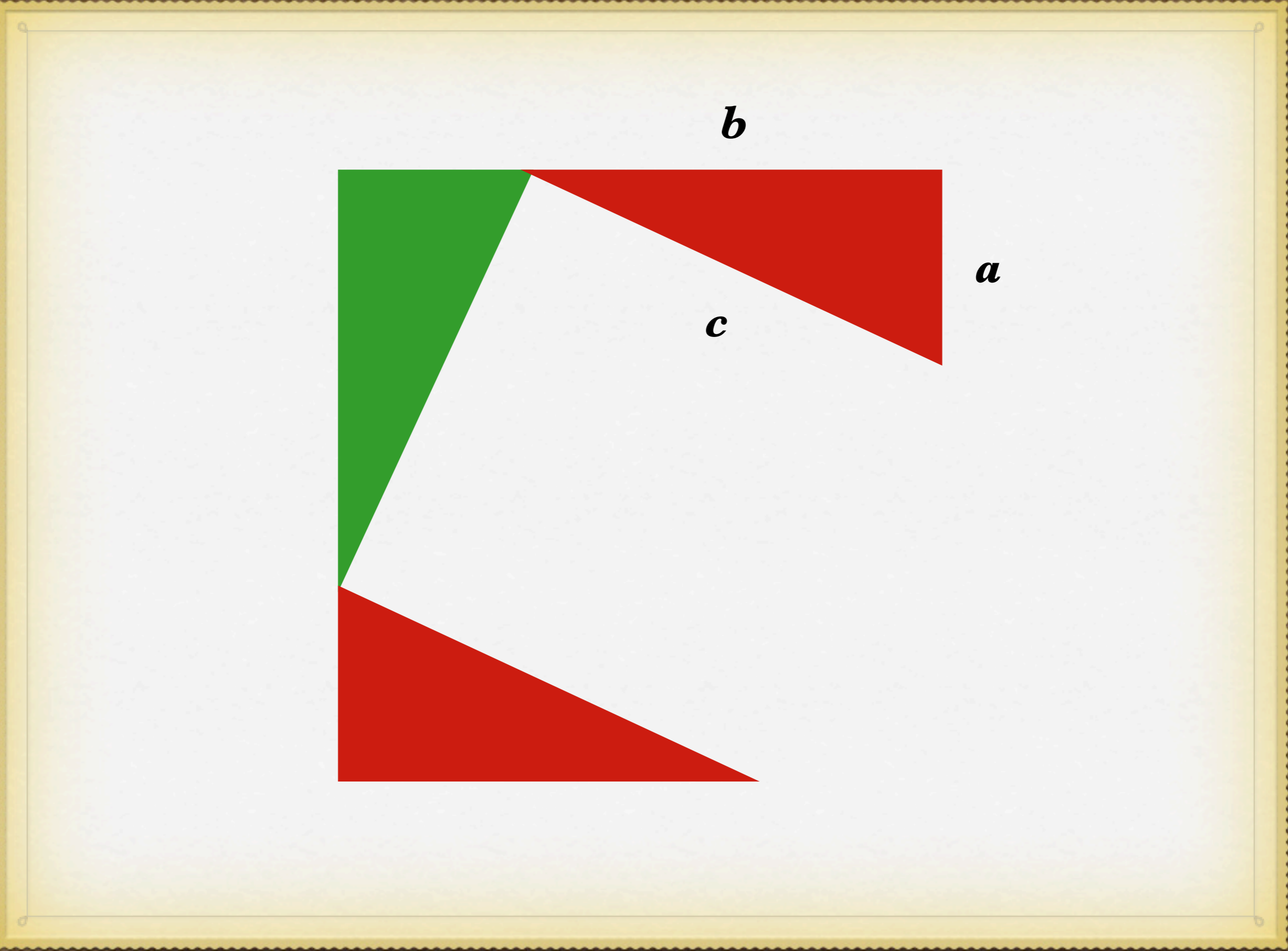
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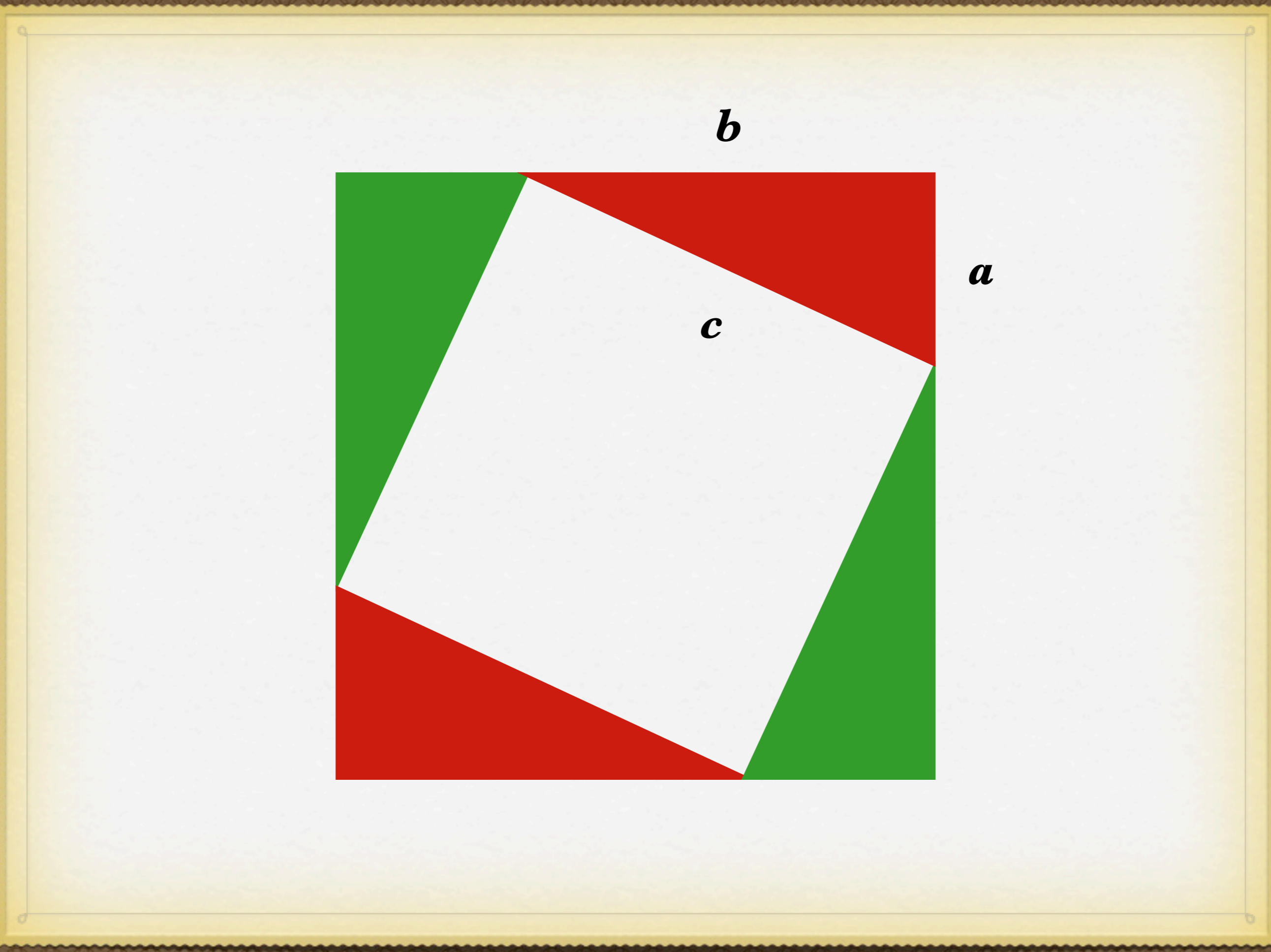


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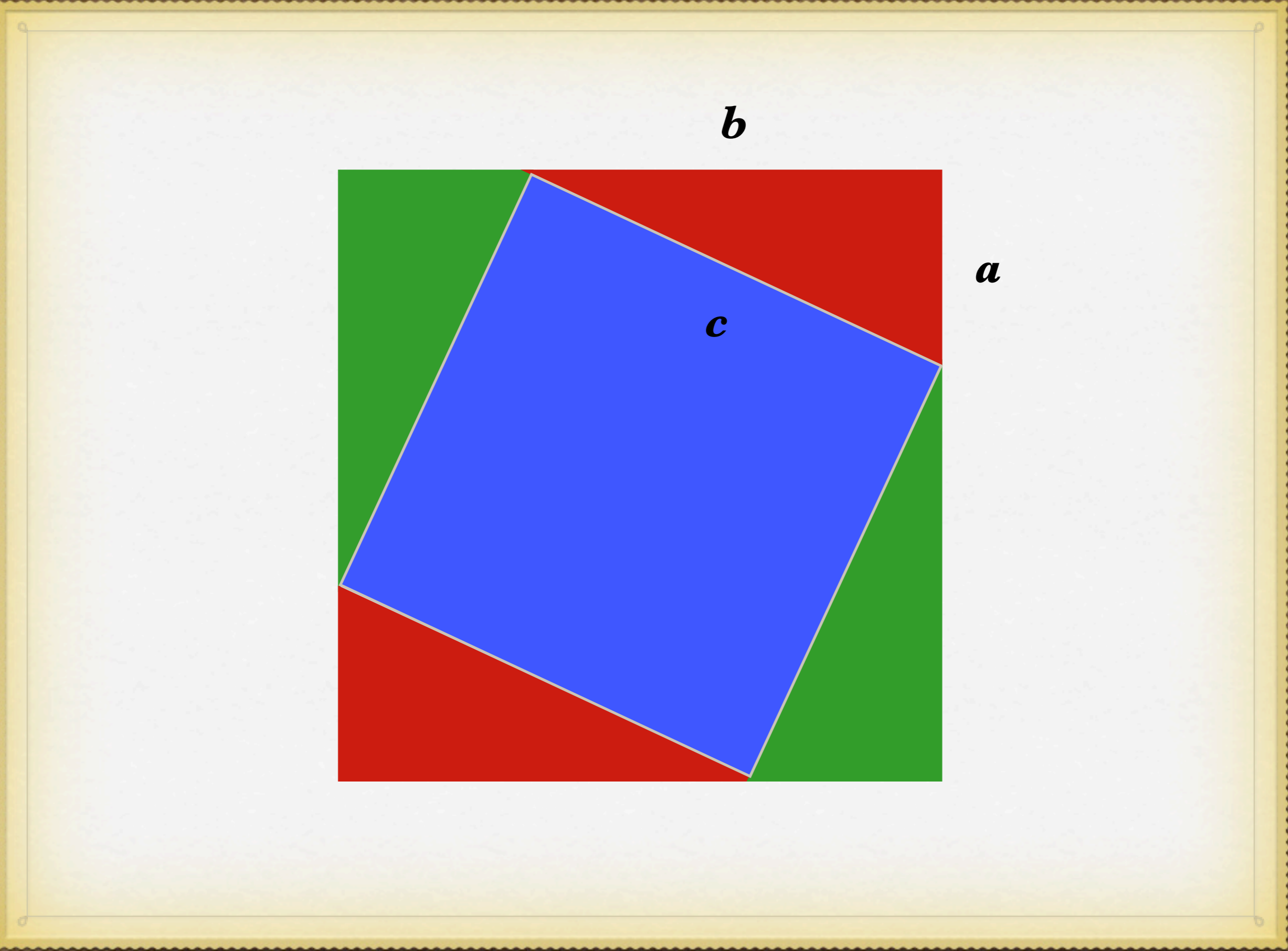


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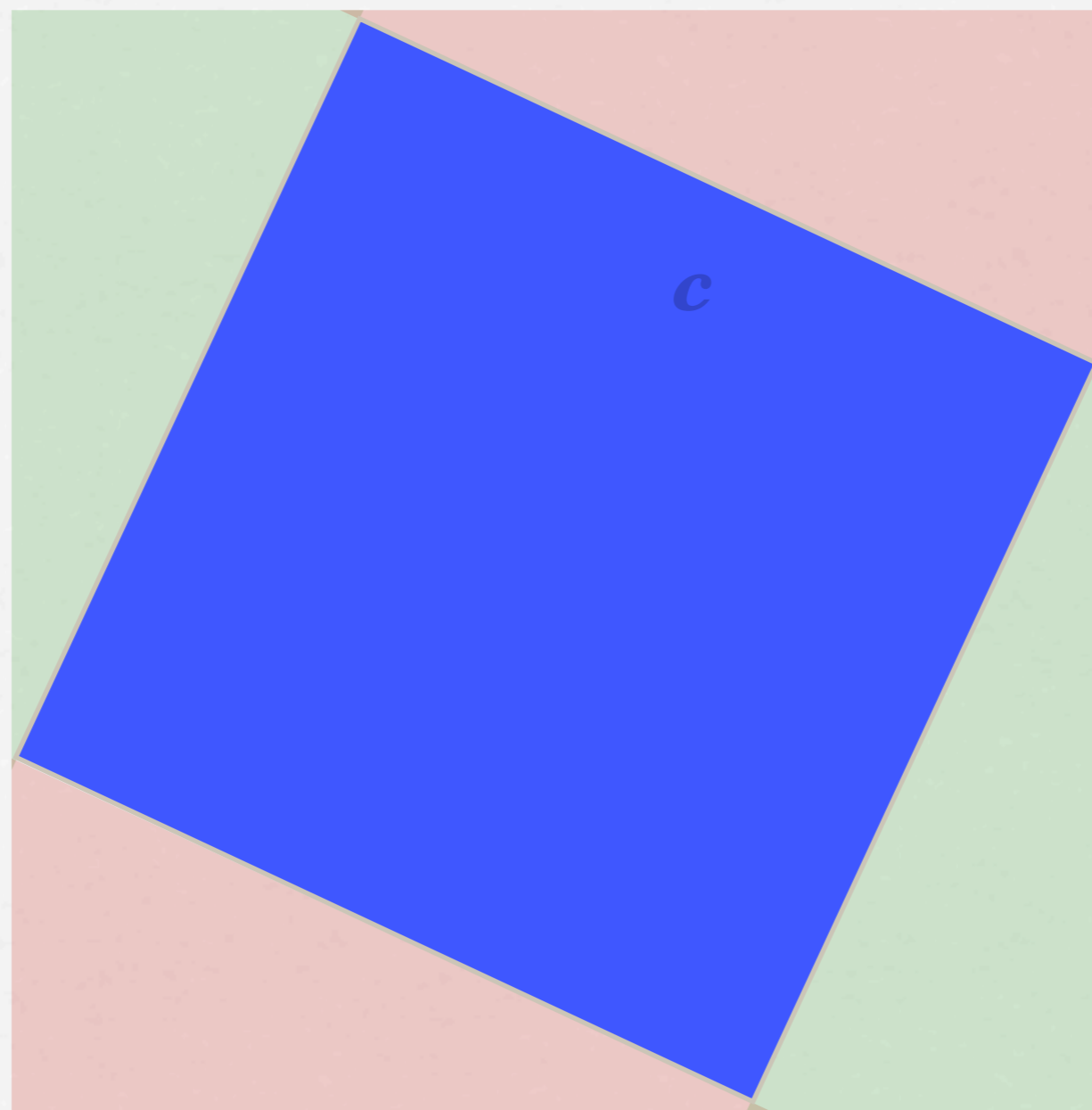
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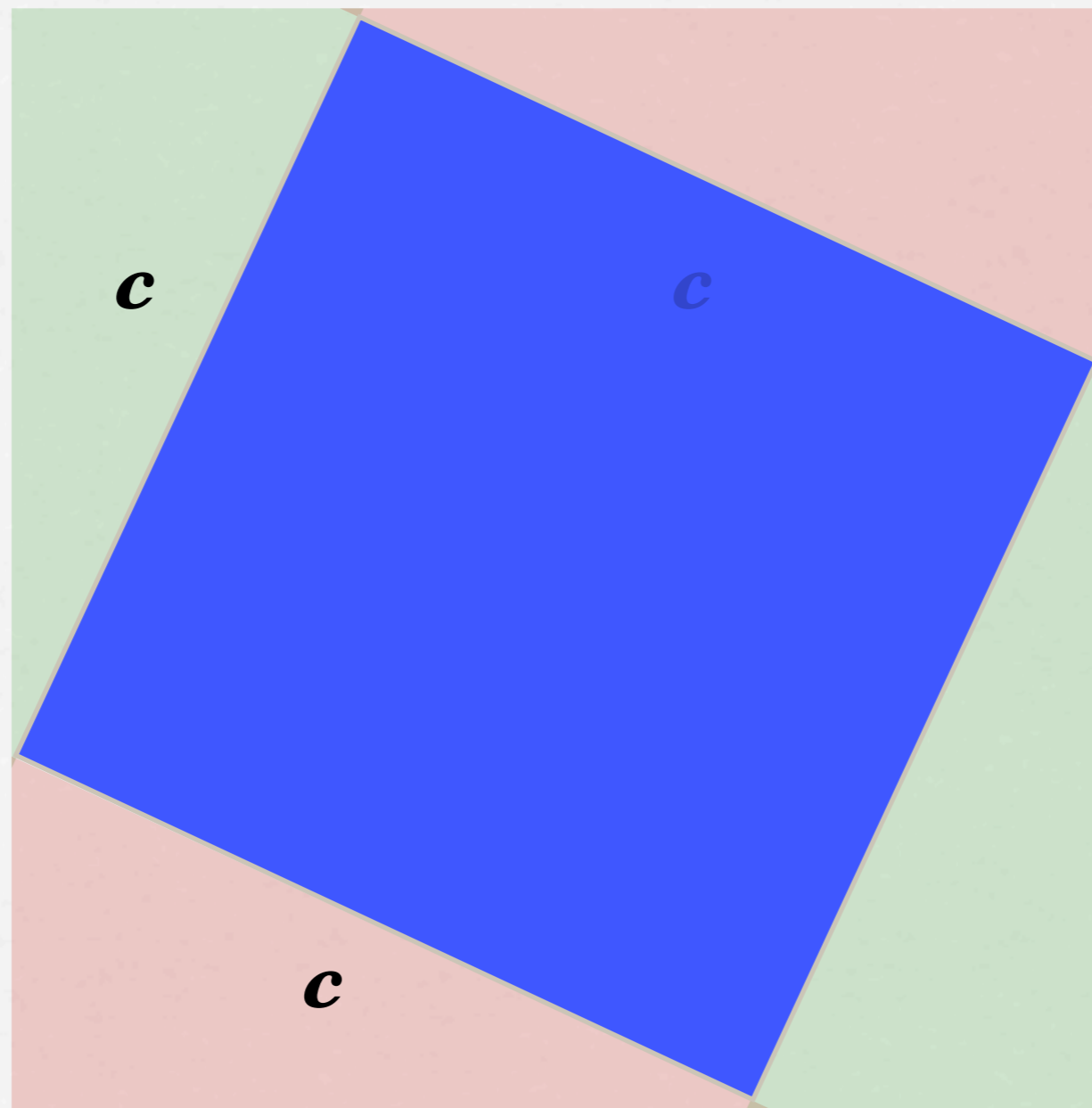


$b$

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$b$

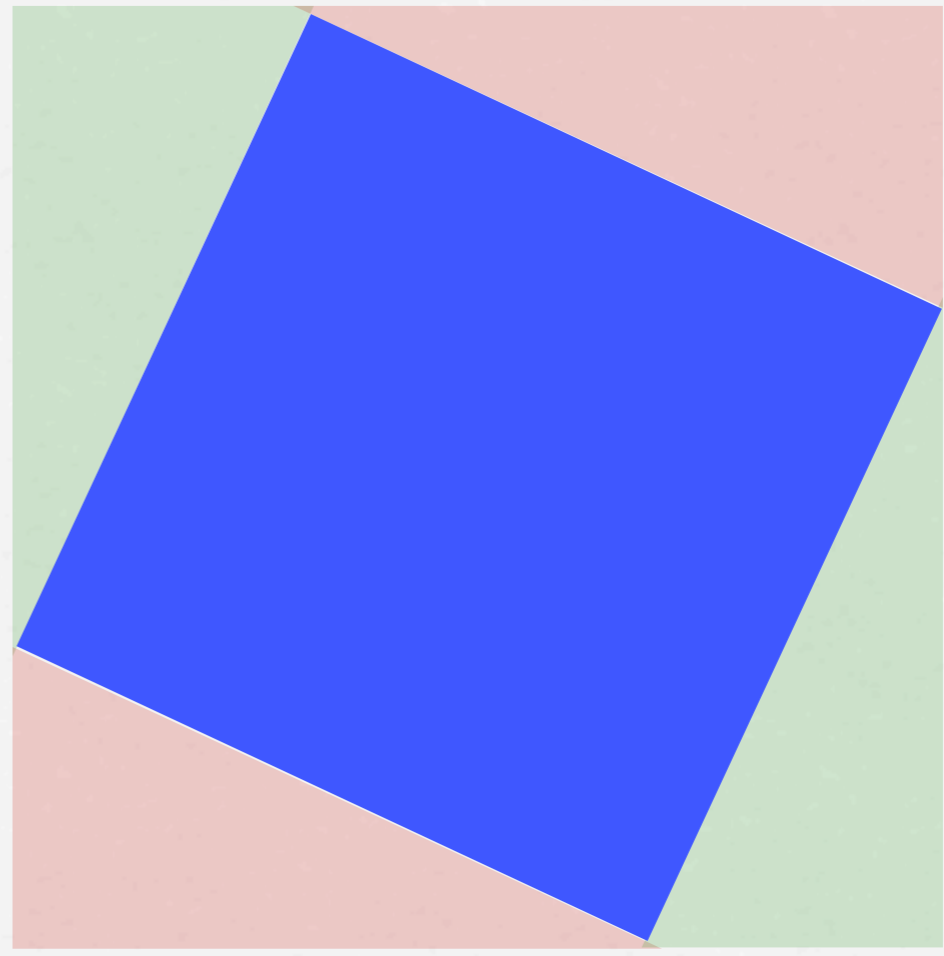
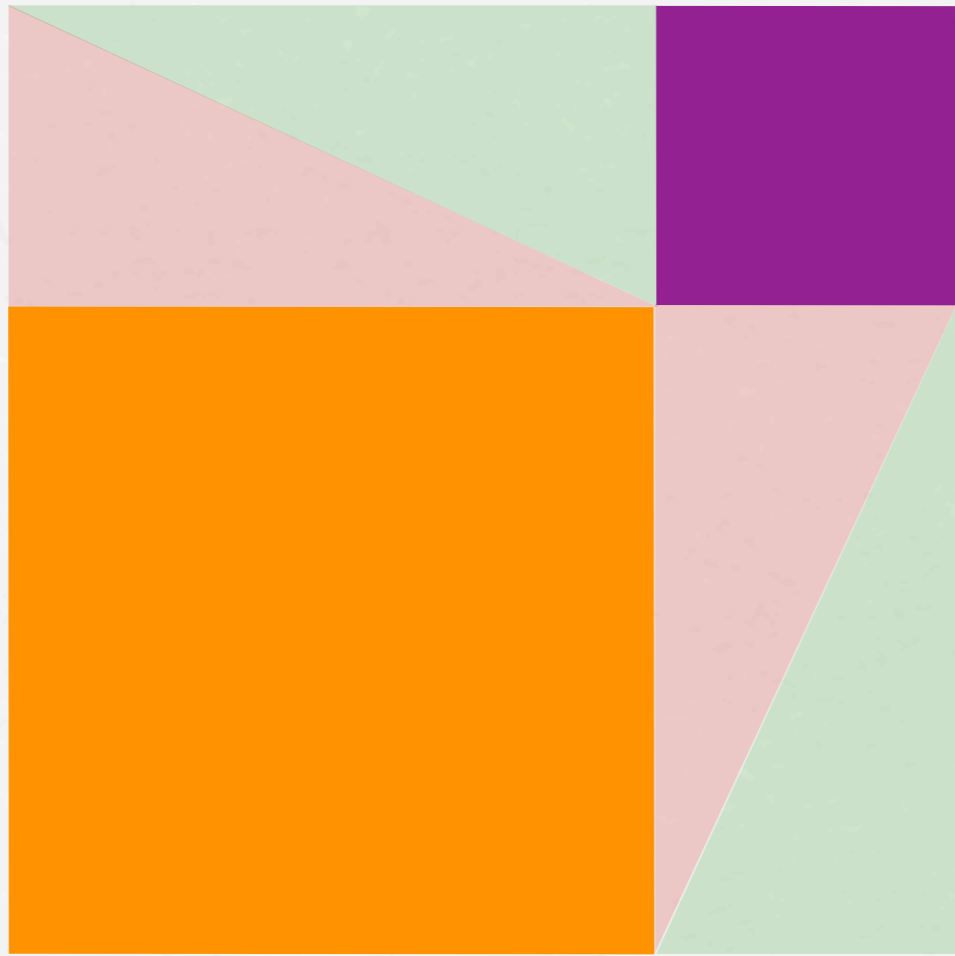
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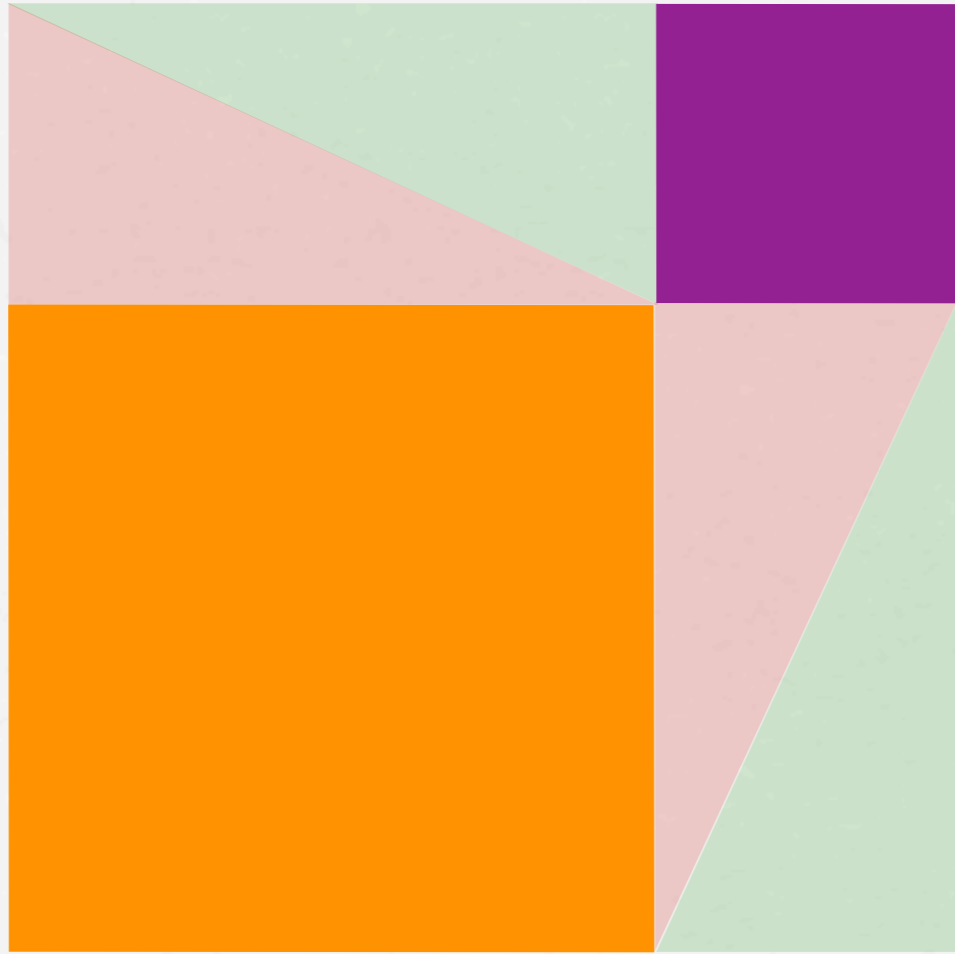
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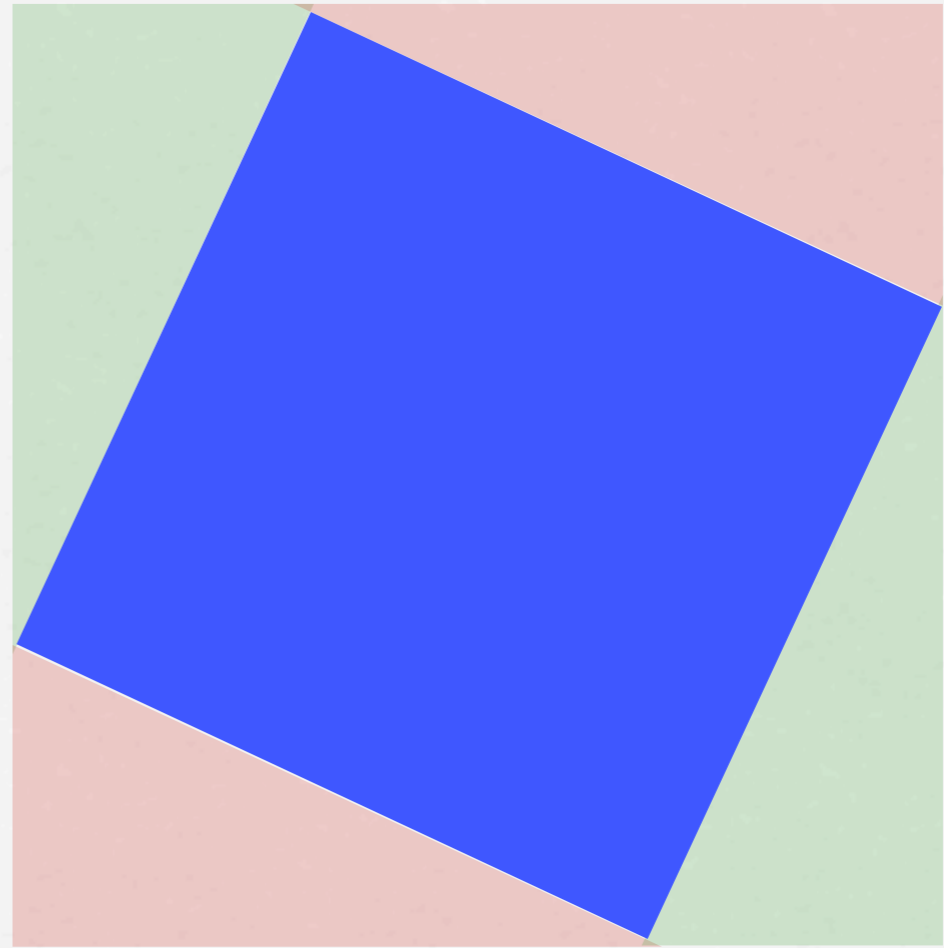




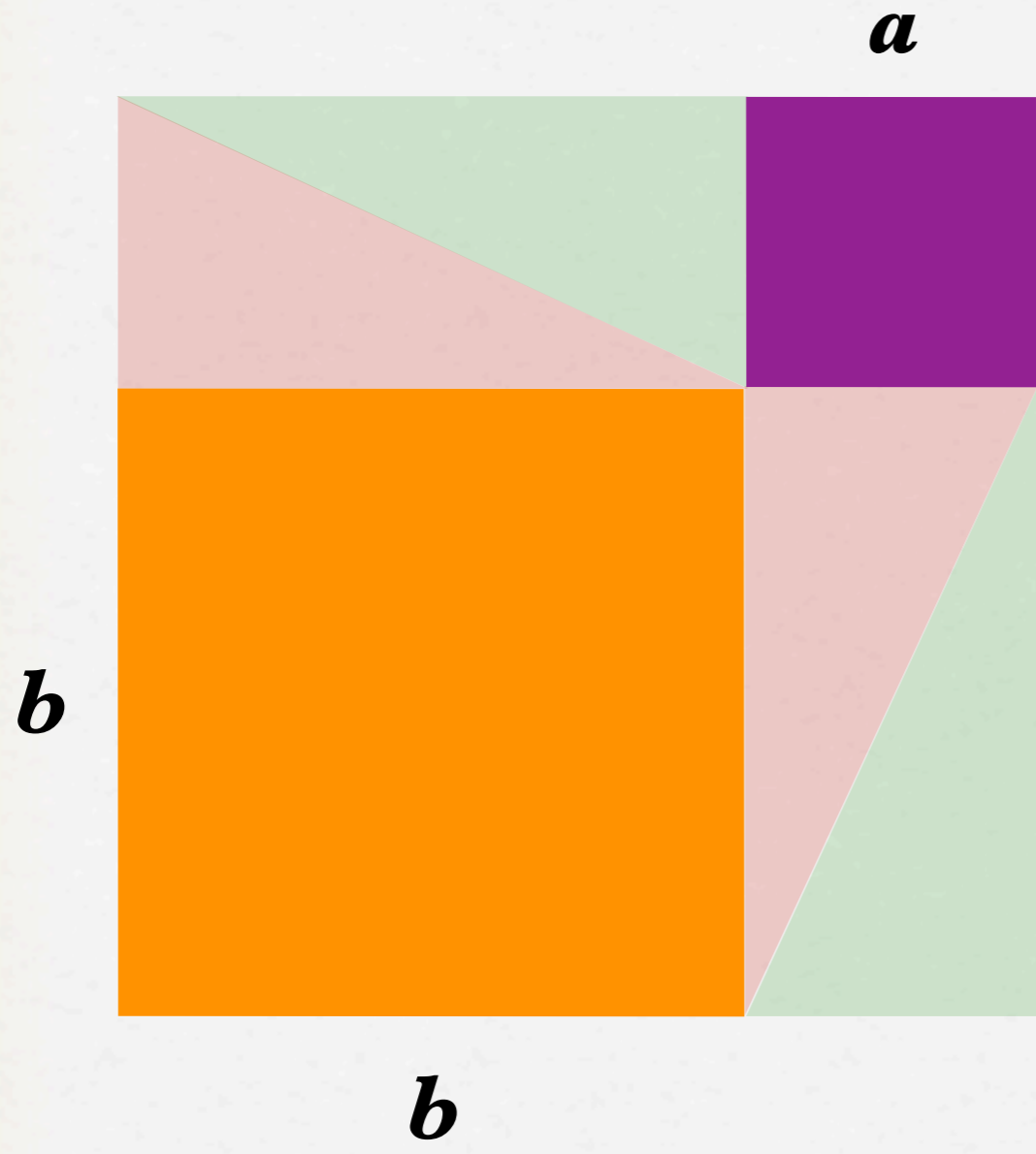
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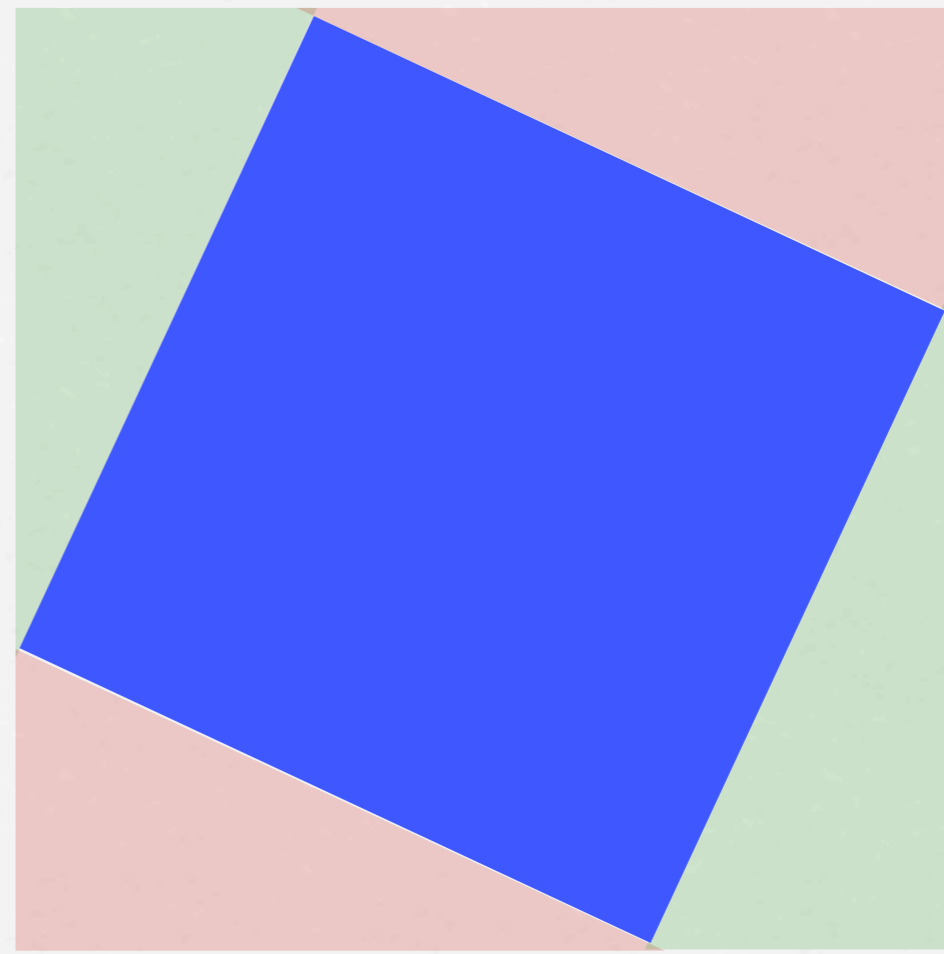
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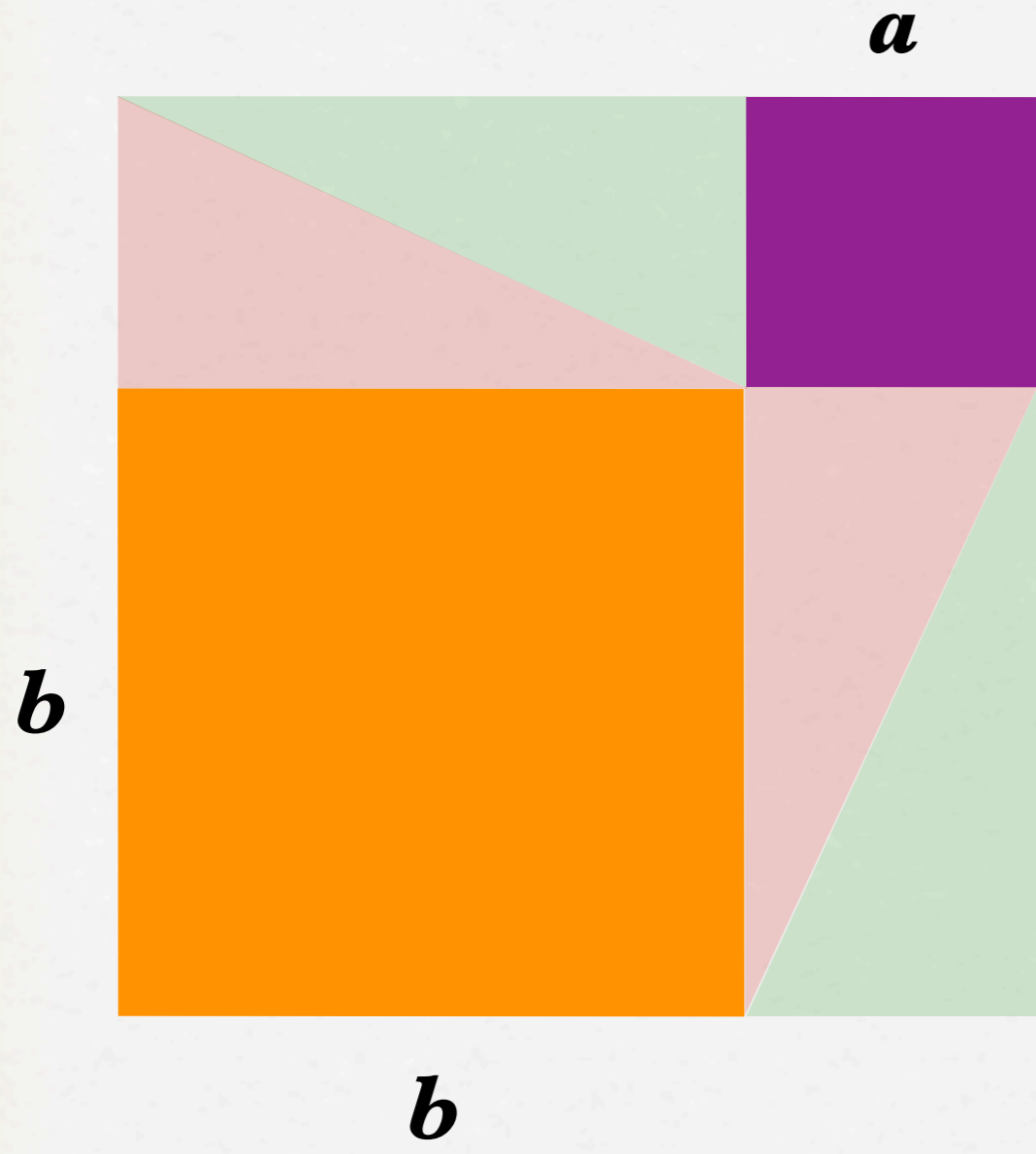




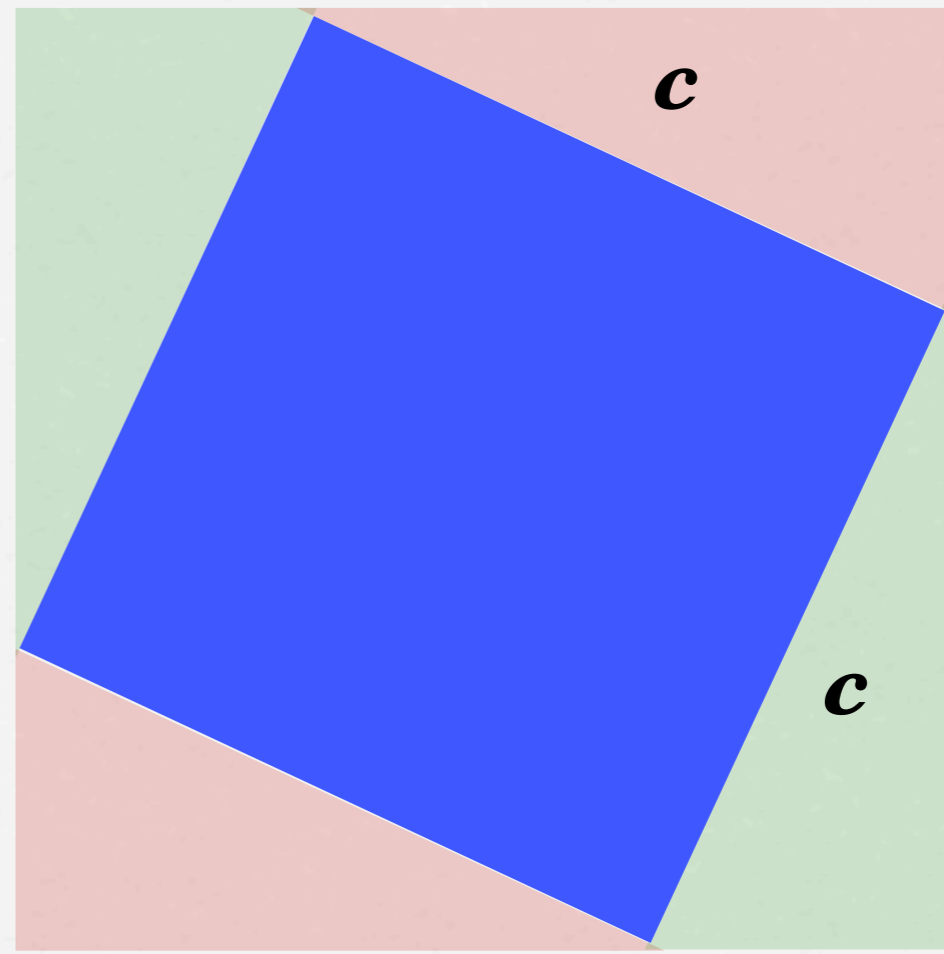


$a$





$a$



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— MATHEMATICS —

# The Numbers of Music





*Musicians of  
Amun, a local  
deity of Thebes*

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*Nicomachus'*  
Enchiridion  
harmonices



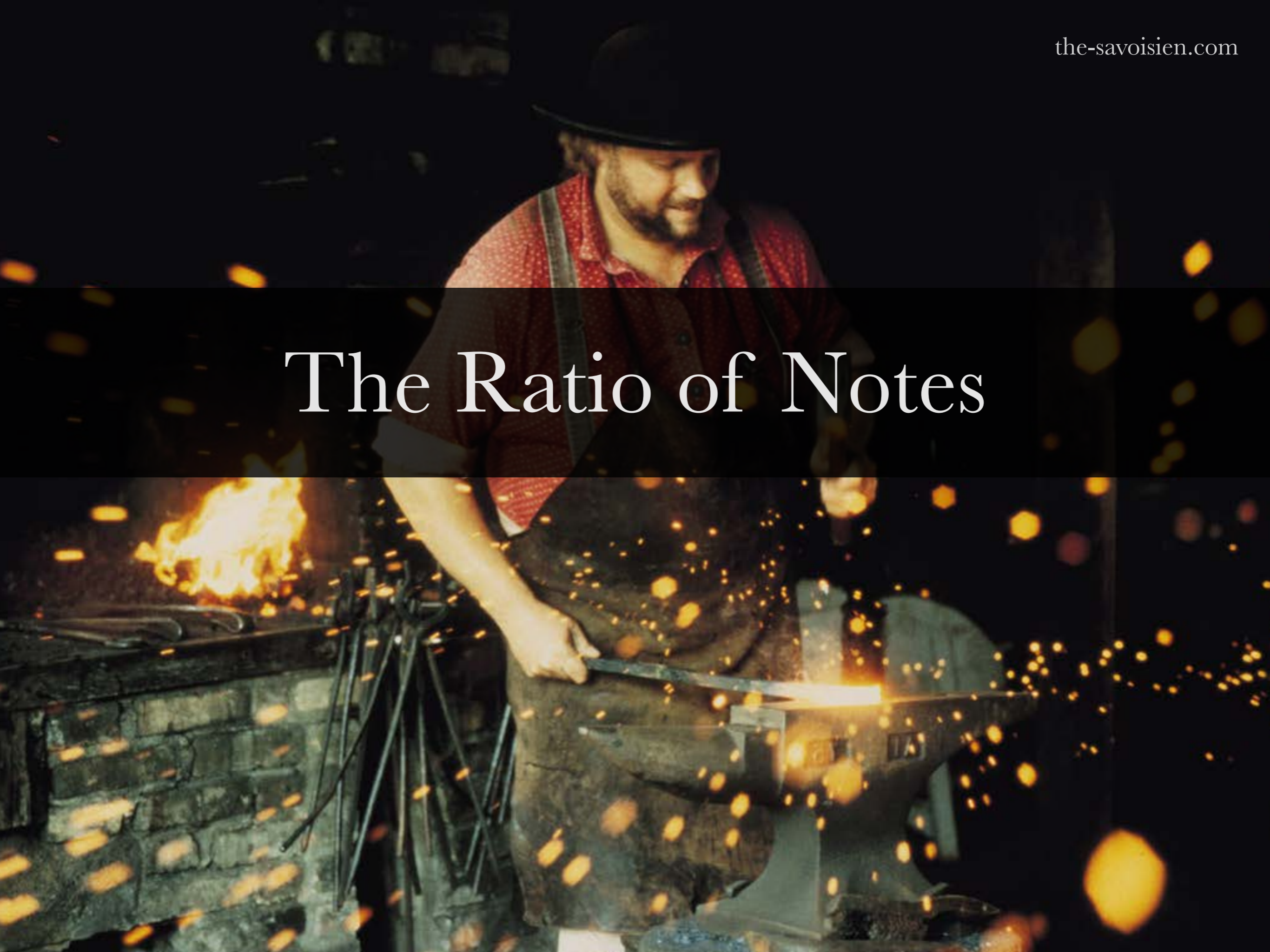


“ Things to do with notes  
are ordered in accordance  
with number.

— NICOMACHUS  
in *Enchiridion harmonices*



# The Ratio of Notes





— MATHEMATICS —

# The Ratio of Notes



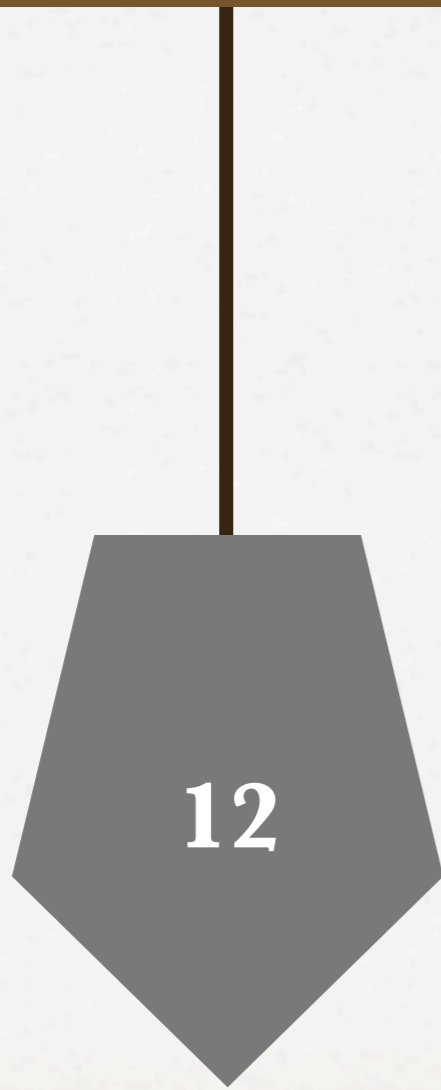
— MATHEMATICS —

# The Ratio of Notes

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— MATHEMATICS —

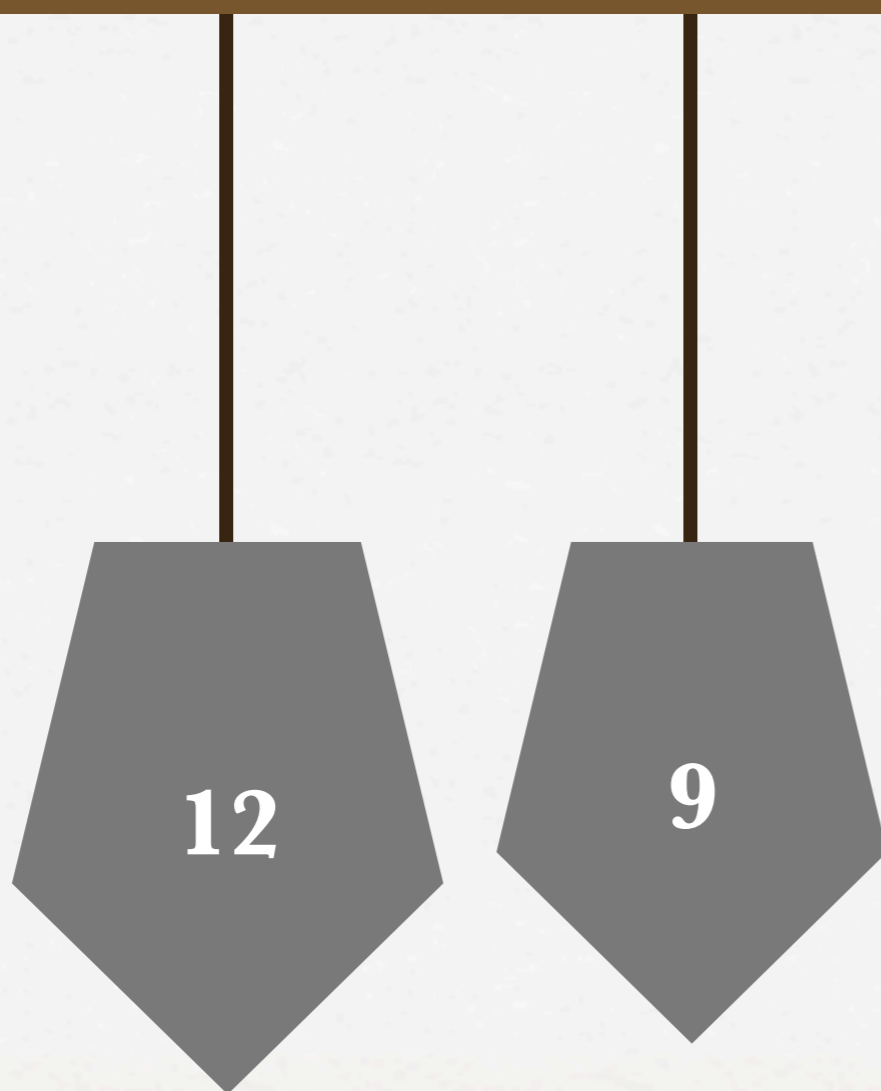
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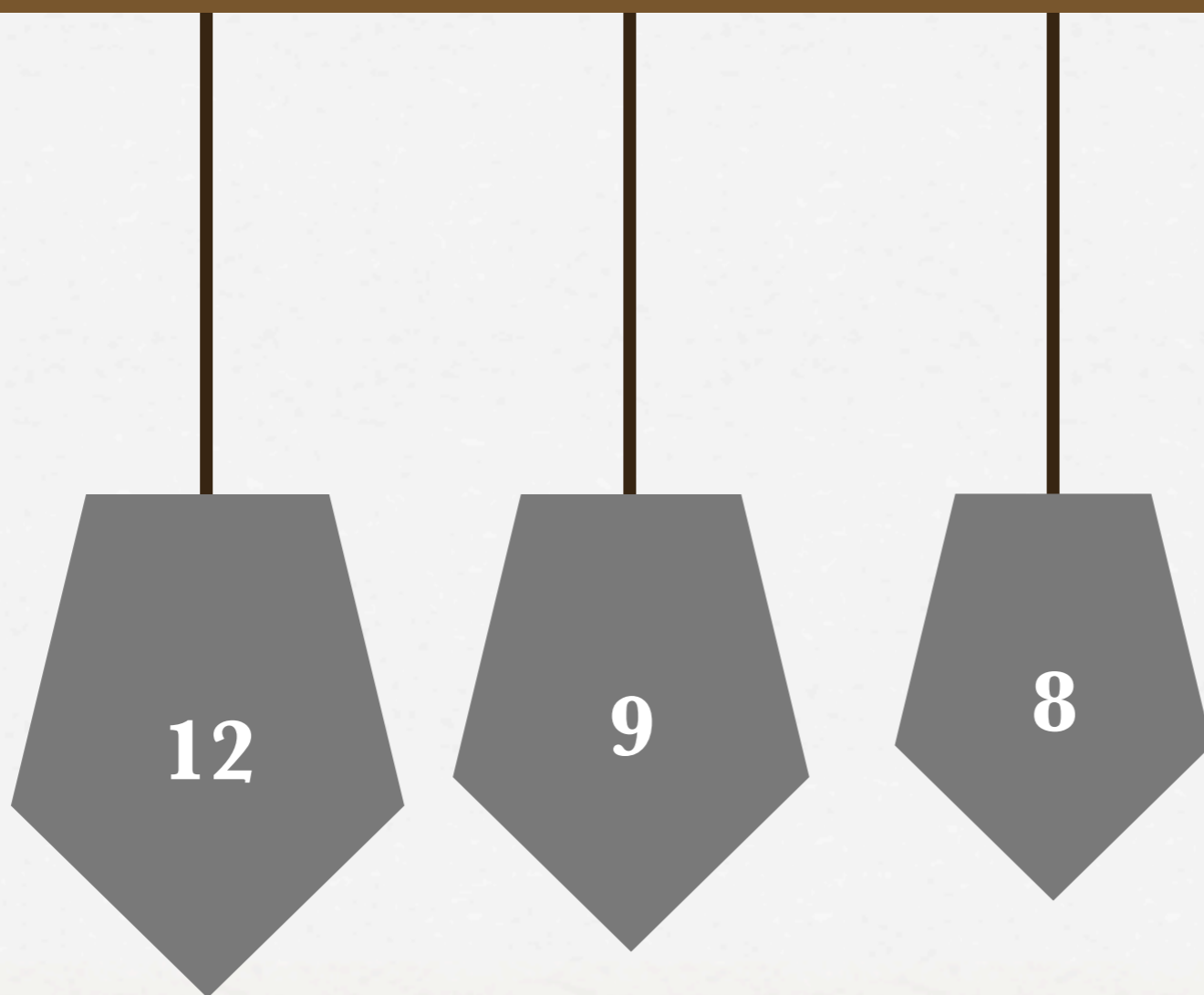
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# The Ratio of Notes



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# The Ratio of Notes





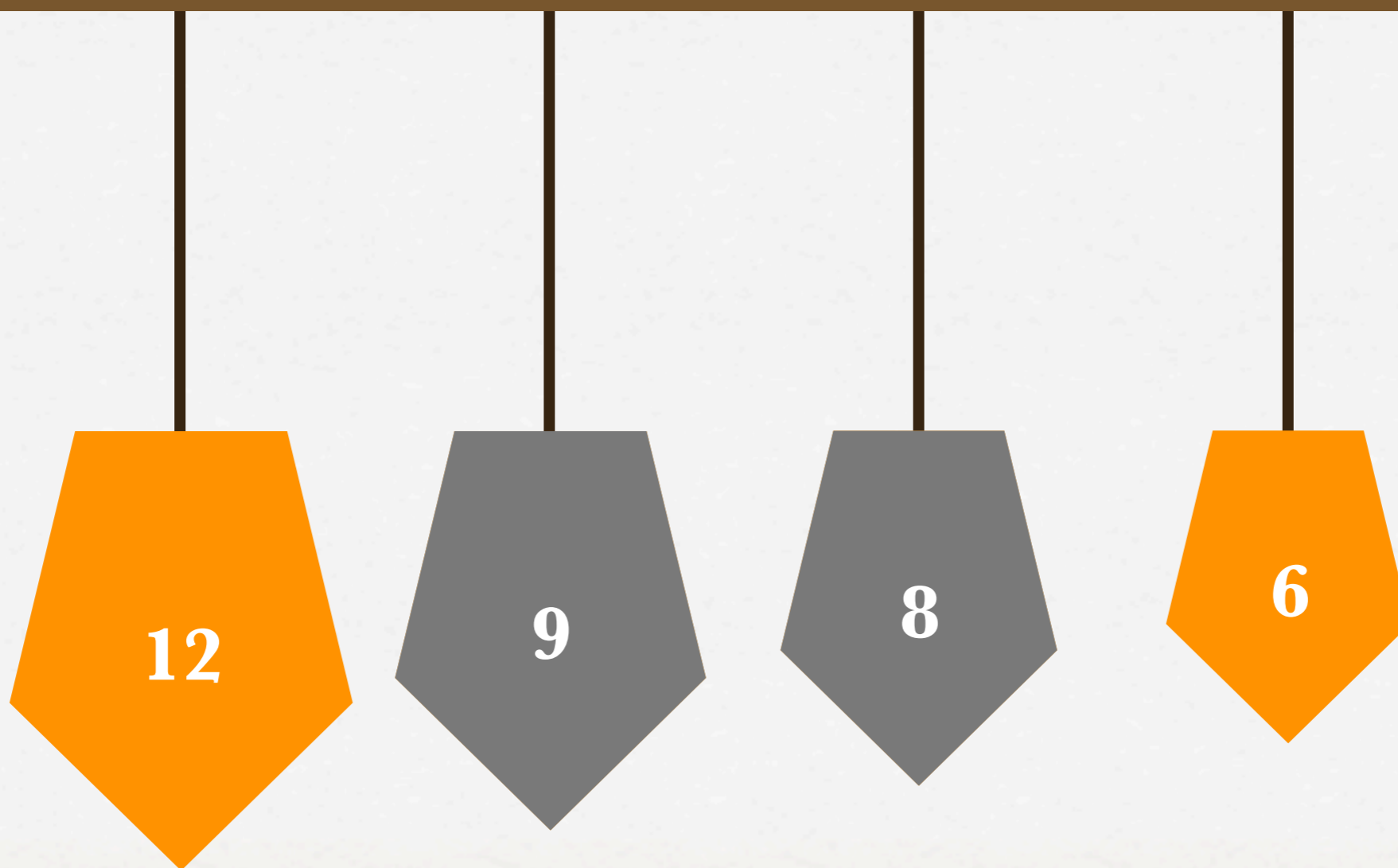
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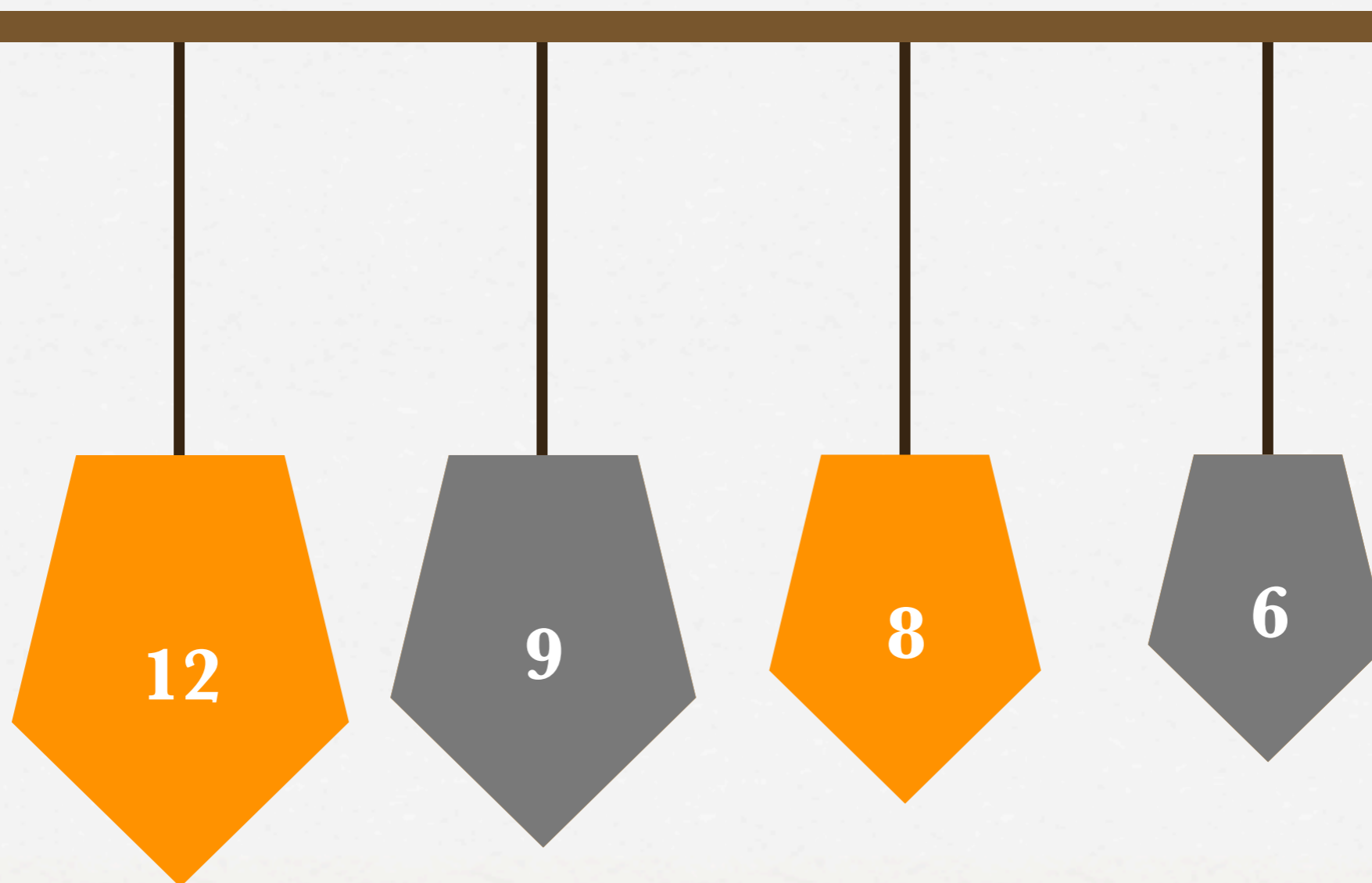
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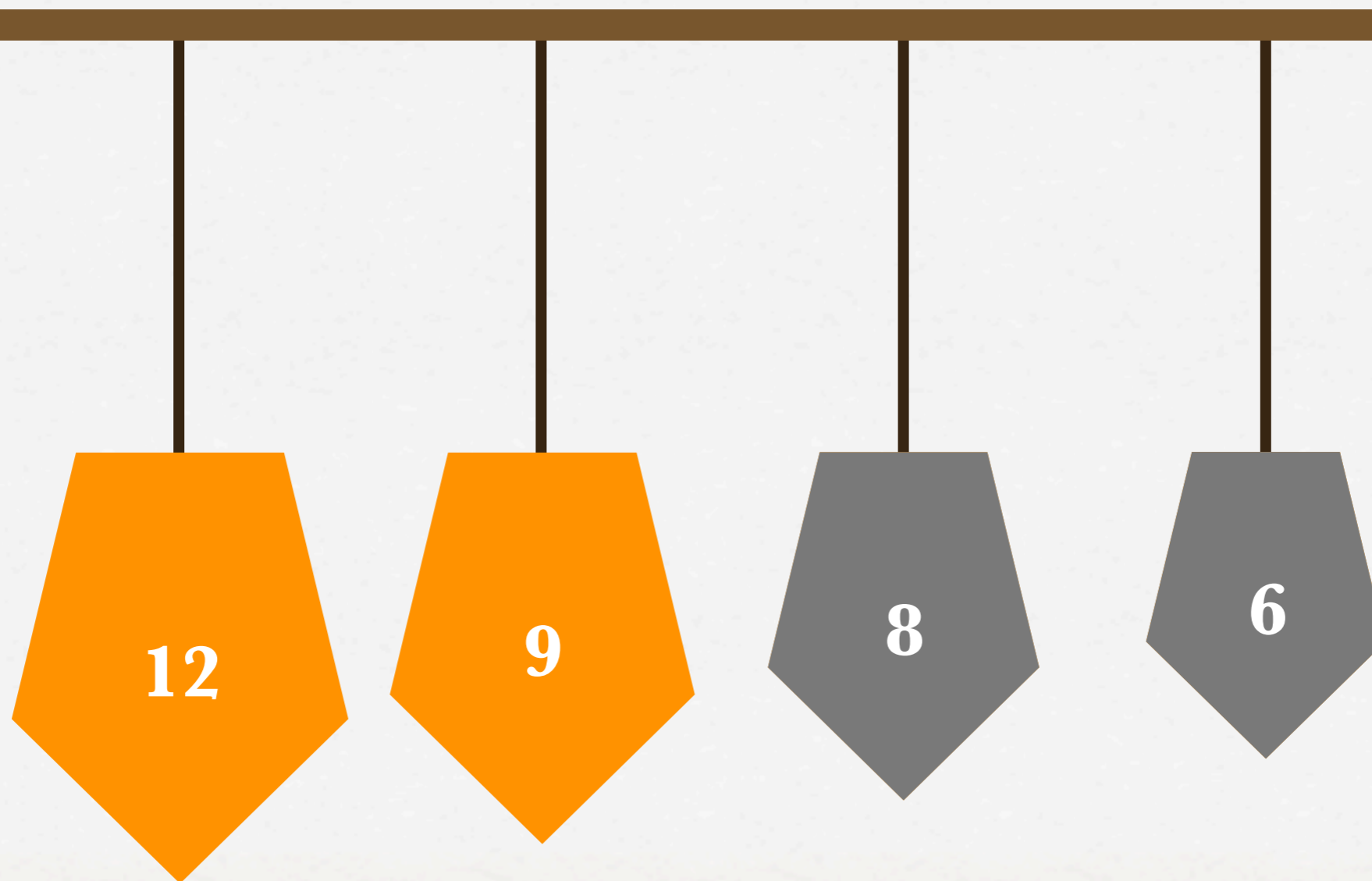
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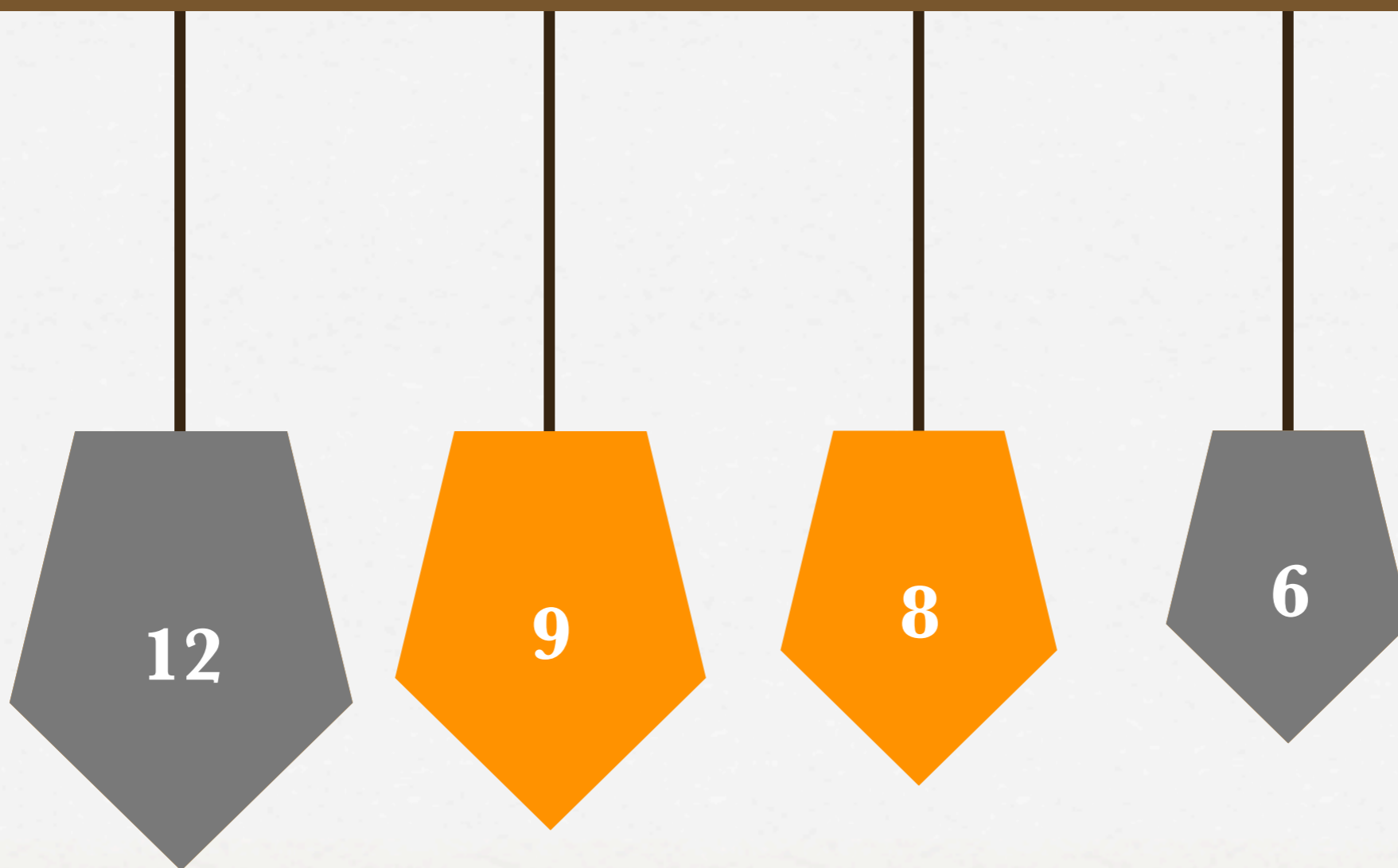
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— MATHEMATICS —

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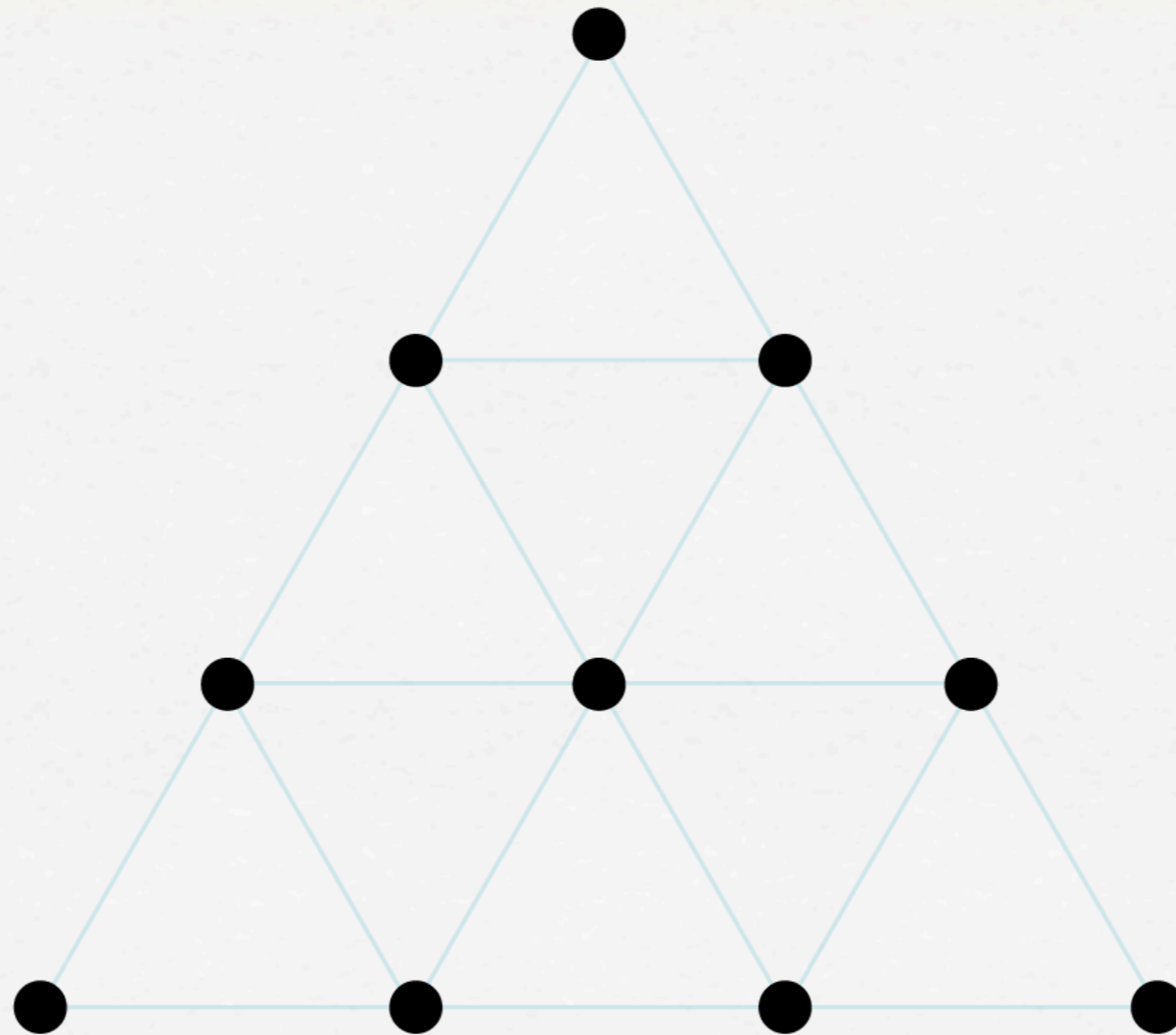




*Pythagoras  
teaching music  
in The School  
of Athens*

Wikimedia Commons





*Pythagoras' tetractys*







“*There's not the smallest orb  
which thou behold'st but in his  
motion like an angel sings.*

— SHAKESPEARE  
*in The Merchant of Venice*



# MATHEMATICS

— the first *pure* mathematician —





# PYTHAGOREANS

— the school, the cult, the legends —





*Pythagoreans celebrate sunrise*



Wikimedia Commons



— PYTHAGOREANS —

# Pythagorean Beliefs

— *the* —

# FINAL YEARS





PYTHAGORAS

# LEGACY

sketch via [chickenscratchinnovations.wordpress.com](http://chickenscratchinnovations.wordpress.com)



“Pythagoras who was so greatly beloved for his wisdom, and whose followers are to this day quite celebrated for the order which was named after him.

— PLATO  
in *The Republic*



“...one of the greatest  
Greek teachers.

— HERODOTUS



# PYTHAGORAS

— the philosopher and mathematician —

*Nick Amoscato & Karl*





— *la* —

**FINE**