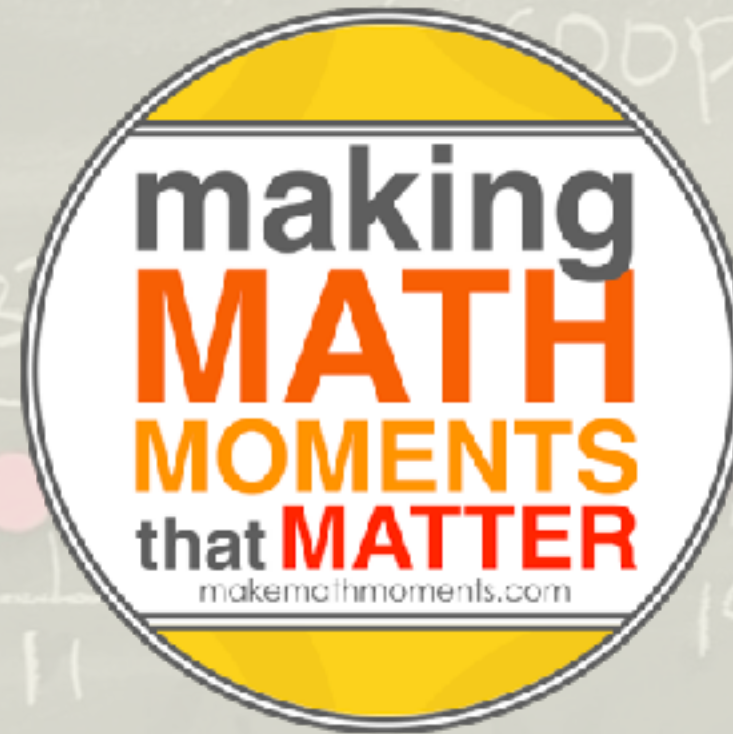


# SPARKING CURIOSITY THROUGH PROBLEM BASED LESSONS

**MAKEMATHMOMENTS.COM**





**WE'LL START AT 7 PM Eastern**

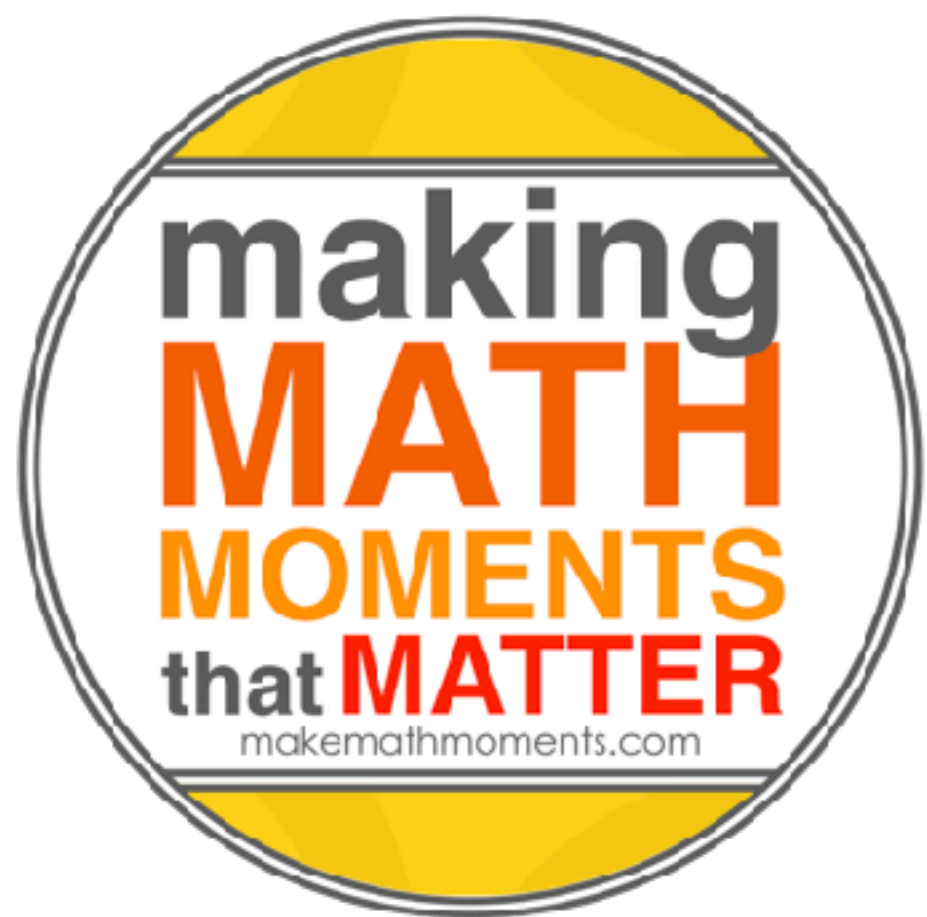
Introduce yourself in the chat!

Who are you?

Where are you from?

What is your role in  
mathematics education?

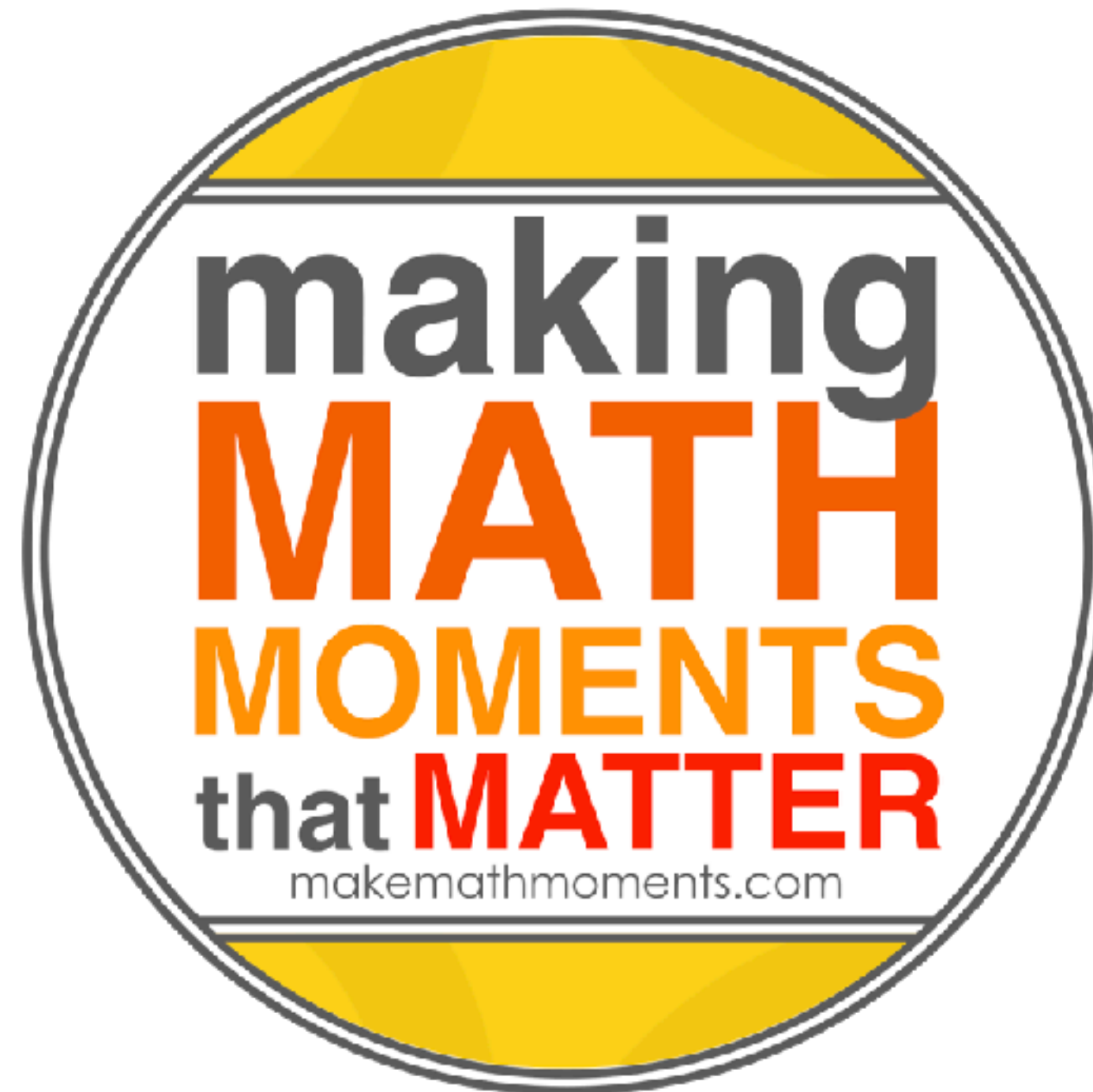




# 4 STRATEGIES TO HELP STUDENTS START PROBLEMS<sup>AND</sup> STICK WITH THEM



# WELCOME



ALL RESOURCES:  
**[makemathmoments.com/usnc](https://makemathmoments.com/usnc)**

MAKE **MATH** MOMENTS.COM

@MakeMathMoments



# WHAT YOU'LL GET

How to structure lessons so that students will dive into the problem solving process without relying on the teacher every step of the way;



# WHAT YOU'LL GET

How to help your students build confidence and resilience so they develop a productive disposition towards mathematics;



# WHAT YOU'LL GET

How to ensure students are building a conceptual understanding in order to build procedural fluency over time; and,



# WHAT YOU'LL GET

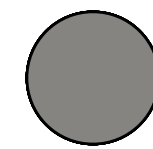
Teacher moves that promote student thinking through productive struggle.

# HOW WE LEARN





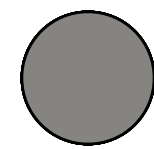
# HOW WE LEARN



MAKE **MATH** MOMENTS.COM

# HOW WE LEARN

**CURRENT**  
KNOWLEDGE  
and  
UNDERSTANDING



**NEW**  
KNOWLEDGE  
and  
UNDERSTANDING

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# HOW WE LEARN

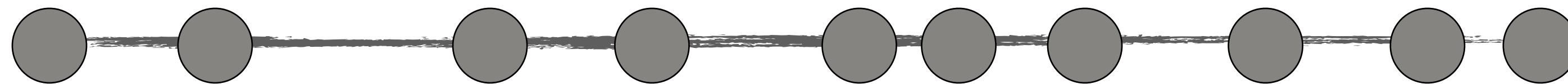
**CURRENT**  
**KNOWLEDGE**  
and  
**UNDERSTANDING**



**NEW**  
**KNOWLEDGE**  
and  
**UNDERSTANDING**

# HOW WE LEARN

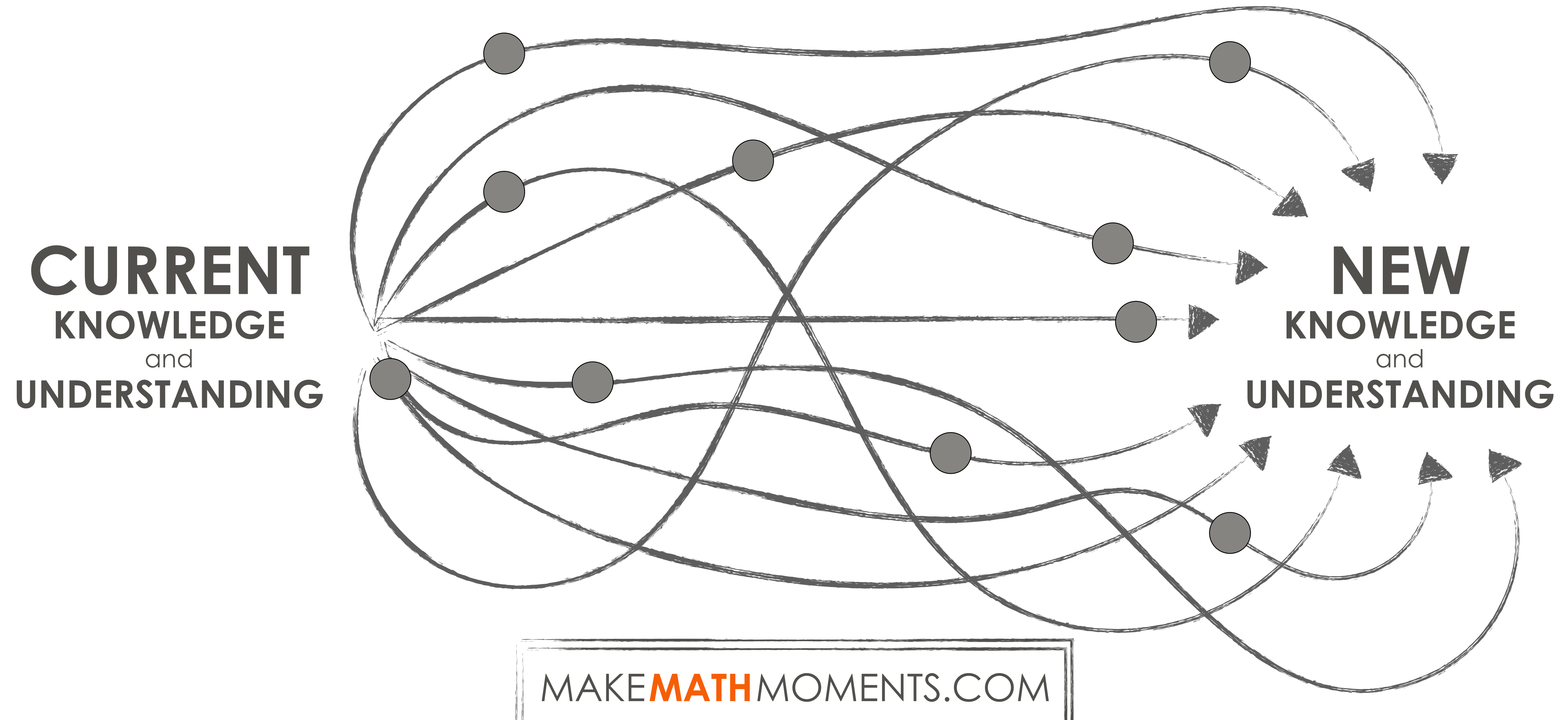
**CURRENT**  
KNOWLEDGE  
and  
UNDERSTANDING



**NEW**  
KNOWLEDGE  
and  
UNDERSTANDING



# HOW WE LEARN



# WHO IS JON ORR?





WHO IS **KYLE PEARCE**?



MATH  
— is —  
VISUAL

[mathisvisual.com](http://mathisvisual.com)



# MATH PD

for your  
*earbuds*



PODCAST

[makemathmoments.com/itunes](http://makemathmoments.com/itunes)





# THE POWER OF MOMENTS

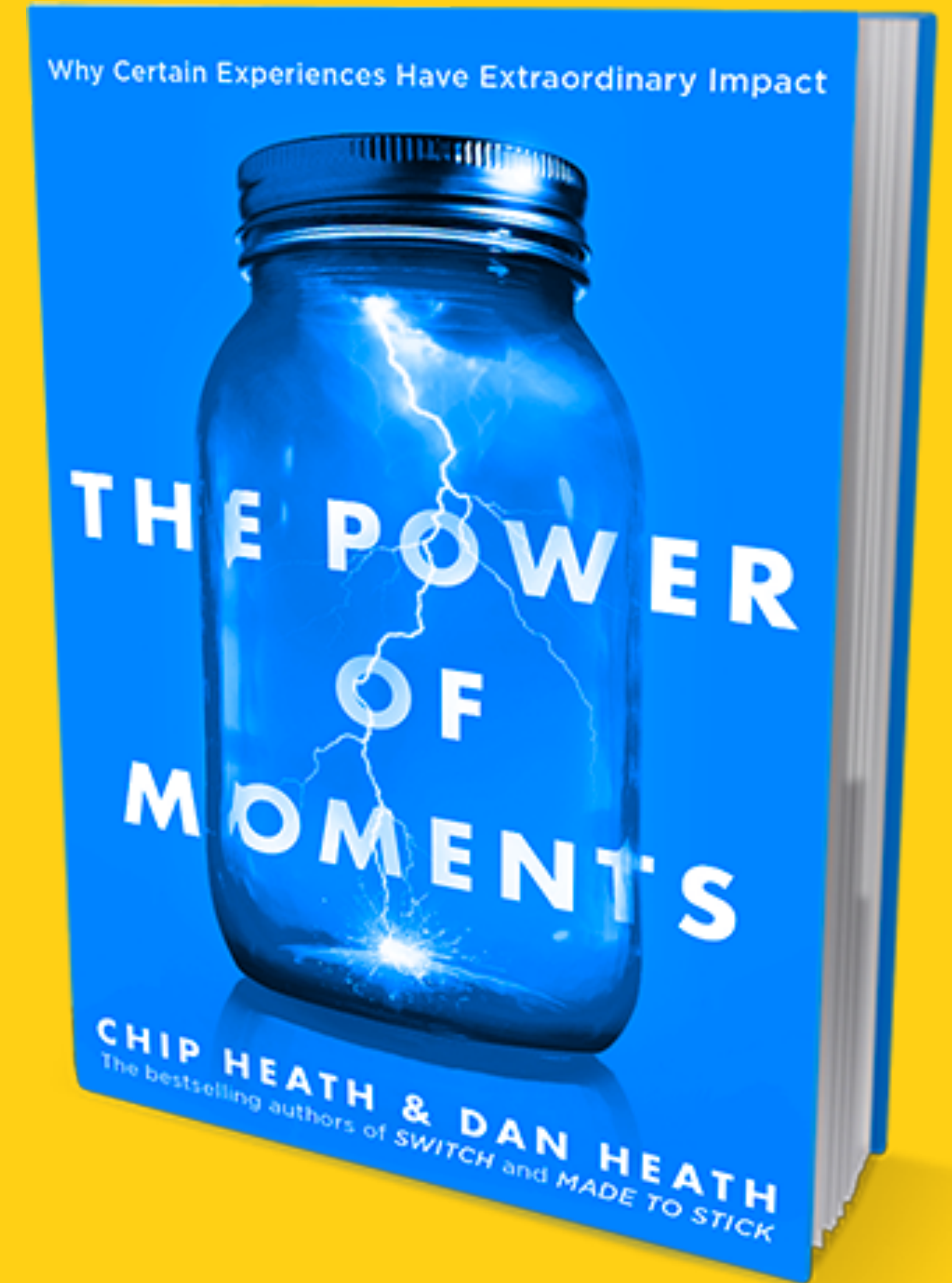
Why Certain  
Experiences Have  
Extraordinary Impact



MAKE **MATH** MOMENTS.COM

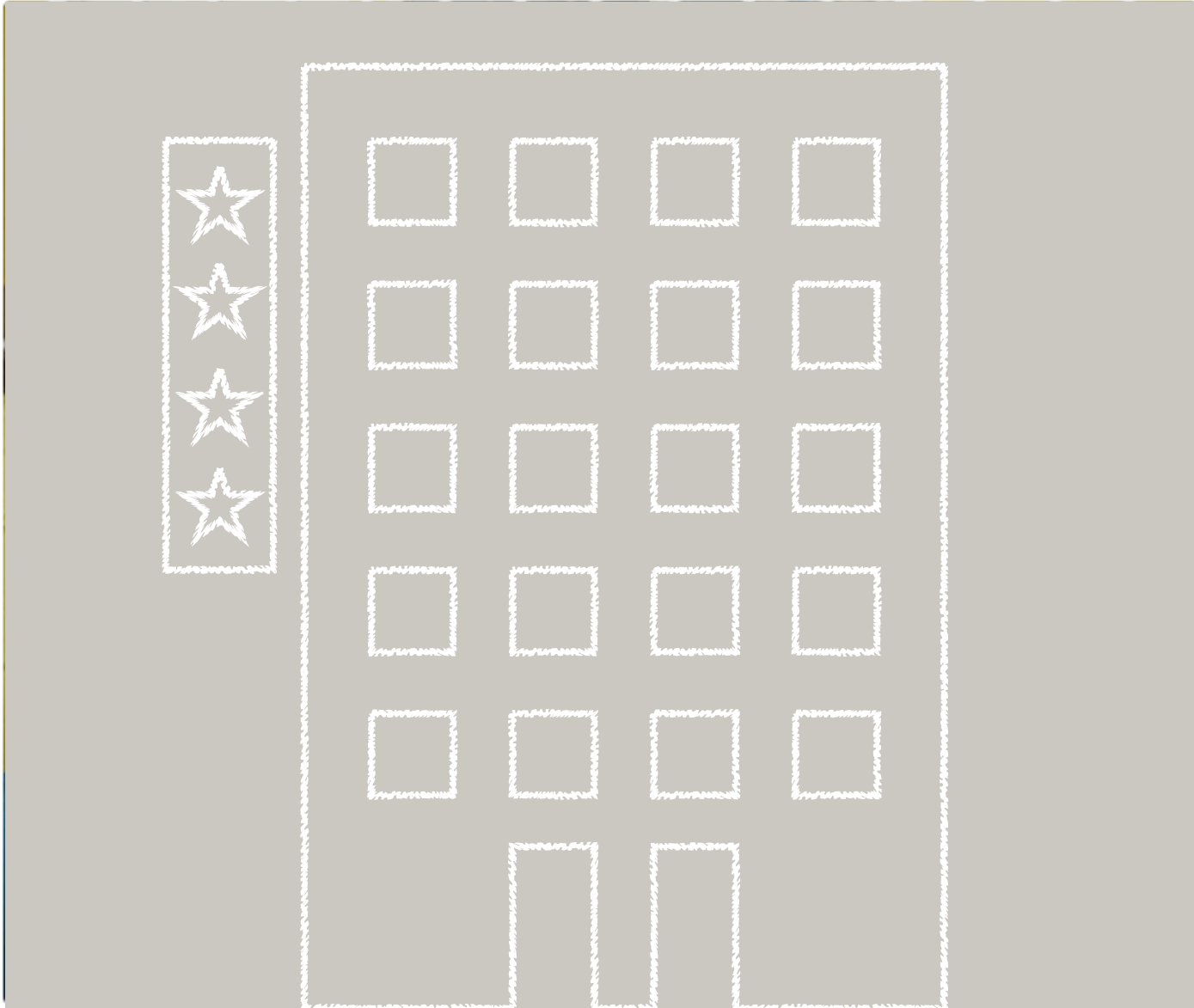
# THE POWER OF MOMENTS


Why Certain  
Experiences Have  
Extraordinary Impact





# THE POWER OF MOMENTS



  
**C\$**

[View Deal](#)

Booking.com ↗  
**C\$**


Agoda.com ↗  
**C\$**


Hotels.com ↗  
**C\$**


[View all 9 deals from](#)  
**C\$**

3,334 reviews

#1 of 432 hotels in Los Angeles

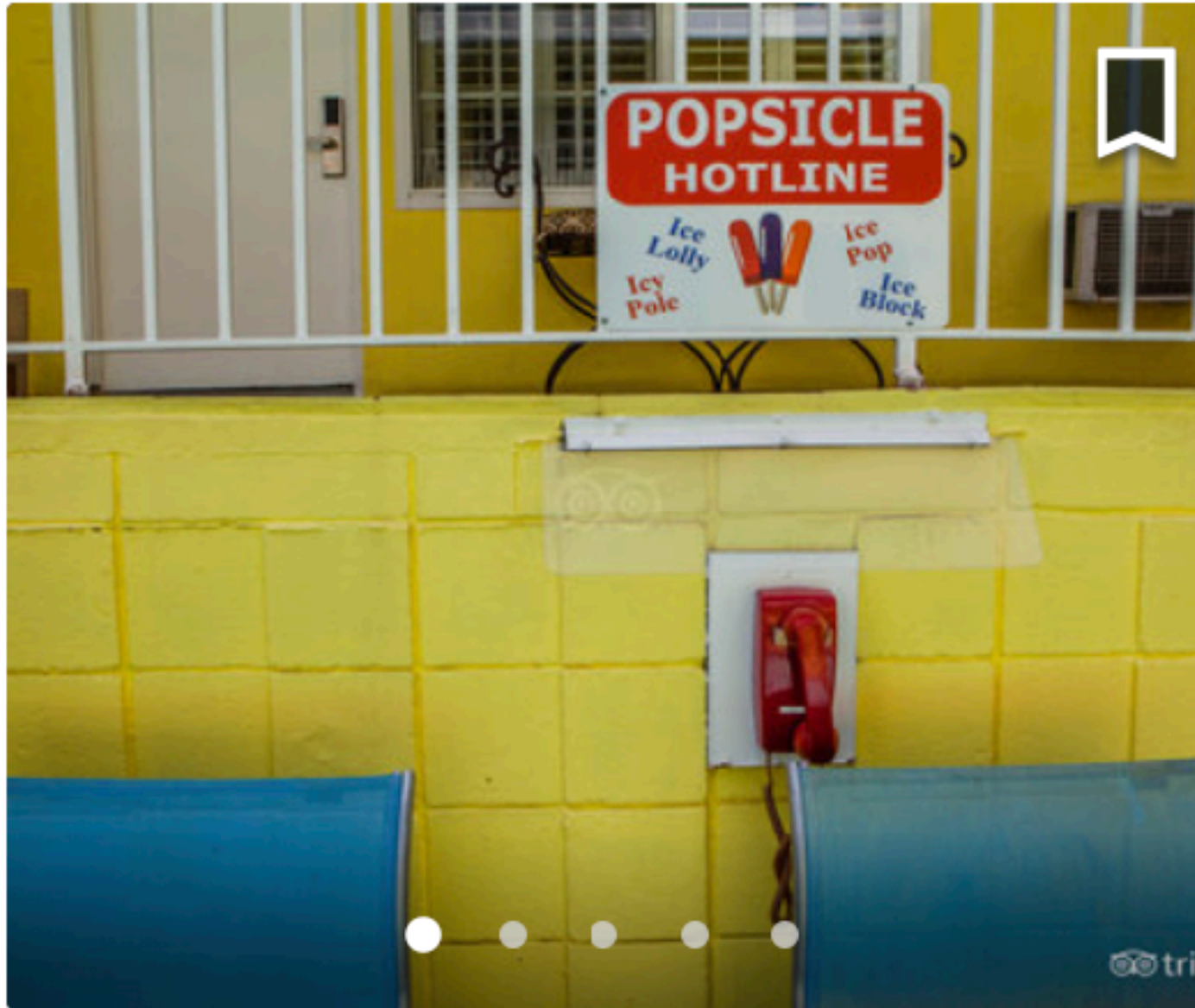
 Free Wifi

 Breakfast included

 Visit hotel website

MAKE**MATH**MOMENTS.COM

# THE POWER OF MOMENTS



## Magic Castle Hotel

 **Expedia.ca**

**C\$291**


**View Deal**




Booking.com ↗  
**C\$290**

Agoda.com ↗  
**C\$291**

Hotels.com ↗  
**C\$290**

**View all 9 deals from  
C\$290 ▼**

 3,334 reviews  
#1 of 432 hotels in Los Angeles

-  Free Wifi
-  Breakfast included
-  Visit hotel website

MAKE**MATH**MOMENTS.COM



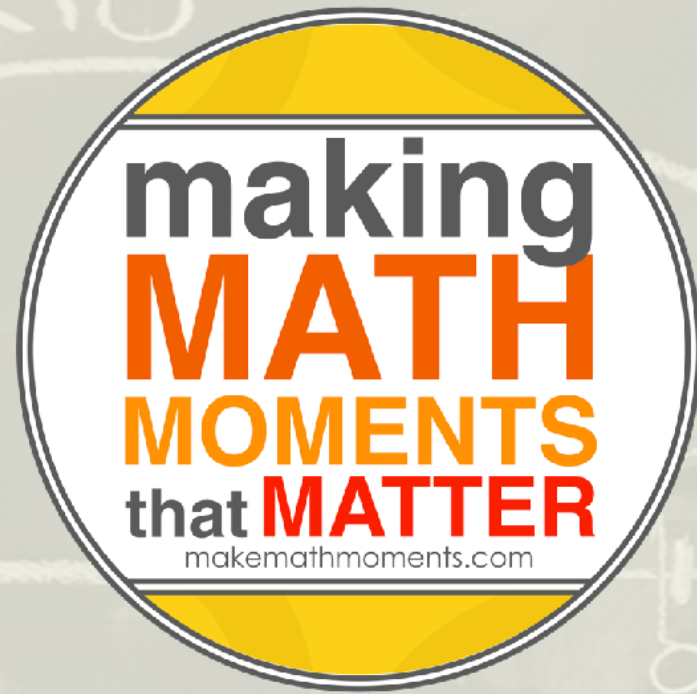
**HOW CAN  
WE LEVERAGE  
THE POWER  
OF MOMENTS  
IN MATH  
CLASS?**



HOW CAN  
WE **LEVERAGE**  
THE **POWER**  
OF **MOMENTS**  
IN **MATH**  
**CLASS?**

IT'S NOT  
**LUCK**  
MEMORABLE  
MOMENTS  
CAN BE  
**CREATED**





# 3-PART FRAMEWORK

[MAKEMATHMOMENTS.COM/FRAMEWORK](https://makemathmoments.com/framework)



PART  
**1**



**SPARKING**  
CURIOSITY

PART  
**2**



**FUELLING**  
SENSE MAKING

PART  
**3**



**IGNITING**  
TEACHER MOVES

# 4 STRATEGIES

These 4 strategies live  
**INSIDE** this framework

# STRATEGY #1

AVOID RUSHING TO THE  
ALGORITHM



# STRATEGY #1 AVOID RUSHING TO THE ALGORITHM

**RUSHING TO  
ALGORITHMS  
WON'T CREATE  
RESILIENT  
PROBLEM SOLVERS**



# SOLVING PROBLEMS FOR STUDENTS

## Math Class

1. Take Up Homework

2. Definitions, Formulae, Procedures/Algorithms

3. Examples

4. Homework



Math Addicts

3 hrs · 🌐

It happens... a lot 😂

... Continue Reading

**Me:**

And THAT is how you  
multiply fractions. BOOM.

\*drops the mic\*

**Student:**

What's a numerator?

**Me:**

\*picks the mic back up\*

Shared By:  
Math Addicts  
on Facebook

# HI-LITERS DON'T CREATE RESILIENT PROBLEM SOLVERS



MAKE **MATH** MOMENTS.COM



# PROBLEM SOLVING MODELS

## Read The Problem

The sum of two numbers is 146. The bigger number is 88. What is the difference between the two numbers?

## Build Your Model

smaller



bigger

CHECK

## Your Math Tutor Says

Your THINKING BLOCKS are in position!

## Problem

Step 1. Understand the problem.

Step 2. Think of a plan.

Step 3. Solve the problem.

Step 4. Check your answer.

to show your work.

## Math Problem Solving Model

Name: \_\_\_\_\_

Pictures

Solve the problem using pictures, models, or graphs.

Solve the problem using numbers. (Remember this is usually an equation. Some problems have multiple equations. You may want to include all of them.)

Numbers

Words

Solve the problem using words. Be sure to include math vocabulary and your math thinking.

© 2010 Debra Allen Learn With ME in Grade Three



## E.P.S.E Problem Solving Model



**E**xplore – Fact Finding.

**P**lan – How will I solve this problem?

**S**olve – Find the answer.

**E**xamine – Show that the answer is reasonable.



EXAMPLE!

Understand

Plan

Solve






Check

Problem



# ANCHOR CHARTS

<u>Math Key Words</u>	
<u>Addition(+)</u>	<u>Subtraction(-)</u>
<ul style="list-style-type: none"><li>• sum</li><li>• total</li><li>• plus</li><li>• in all</li><li>• altogether</li><li>• and</li><li>• perimeter</li><li>• increased by</li><li>• together</li></ul>	<ul style="list-style-type: none"><li>• difference</li><li>• less than</li><li>• minus</li><li>• take away</li><li>• fewer</li><li>• left over</li><li>• exceed</li><li>• are not</li><li>• remain</li><li>• how many more</li></ul>
<u>Multiplication(x)</u>	<u>Division(÷)</u>
<ul style="list-style-type: none"><li>• times</li><li>• each</li><li>• in all</li><li>• twice</li><li>• product</li><li>• area</li><li>• factor</li><li>• multiple</li><li>• multiplied by</li></ul>	<ul style="list-style-type: none"><li>• half</li><li>• same</li><li>• split</li><li>• quotient</li><li>• divisor</li><li>• equal group</li><li>• separate</li><li>• divided by</li><li>• dividend</li><li>• shared equally</li><li>• distribute</li><li>• cut up</li></ul>

<u>Math Strategies</u>	
	<u>circle</u> key numbers
	<u>underline</u> the question
	<u>box</u> any math <u>action</u> words <small>+ - x ÷</small>
	<u>evaluate</u> (what steps do I take?)
	<u>solve</u> & check ✓



“

*We plan our lessons under  
the **ASSUMPTION** that kids  
can't or won't **THINK***

”

*Peter Liljedahl*

Make  
**STUDENTS**  
**Anticipate**  
**WHAT IS NEEDED**

# **STRATEGY #1 AVOID RUSHING TO THE ALGORITHM**

**STOP PRE-TEACHING**

**CREATE A PRODUCTIVE STRUGGLE**

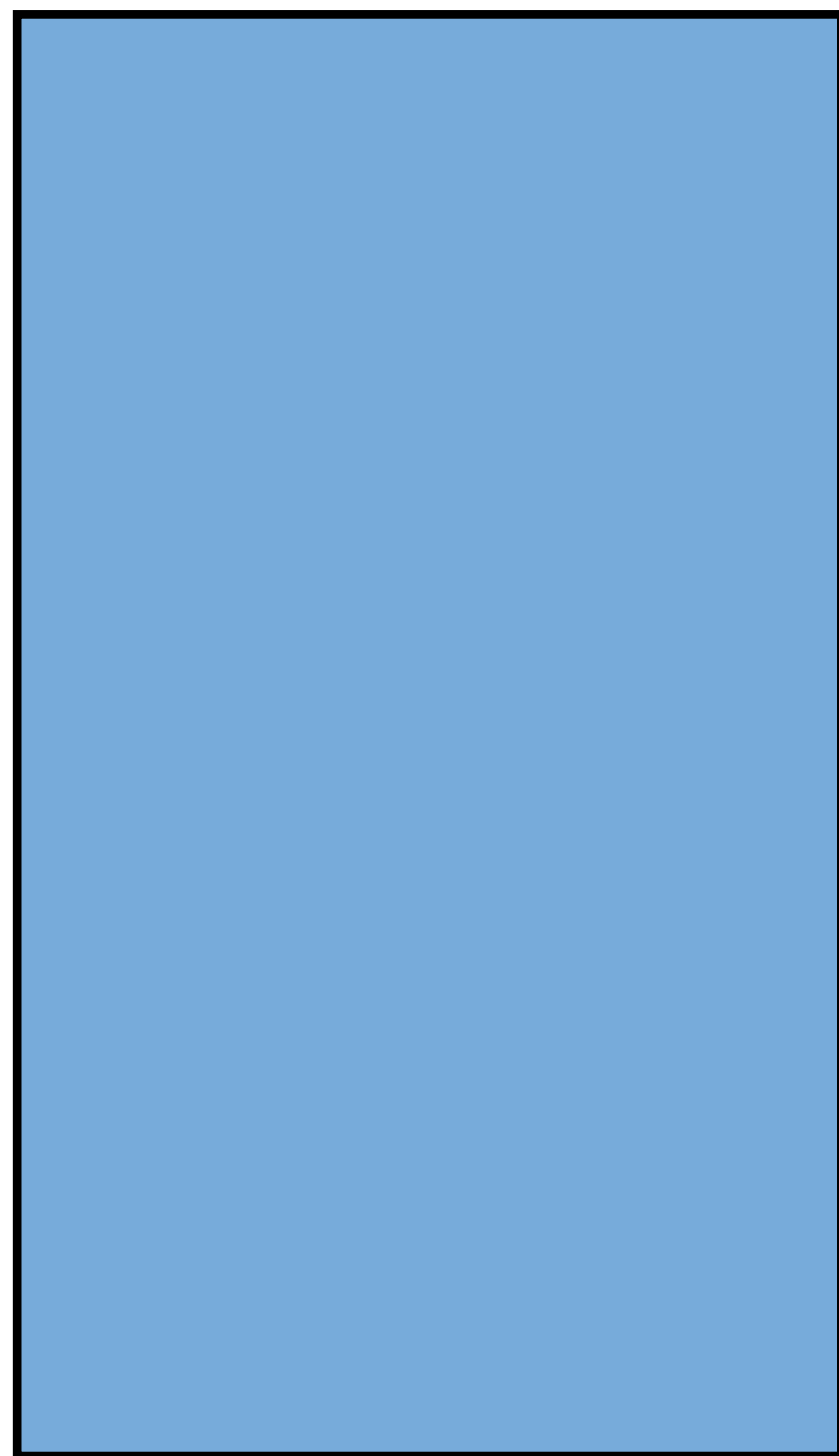
**START LISTENING & OBSERVING**



# GOING FROM THIS...

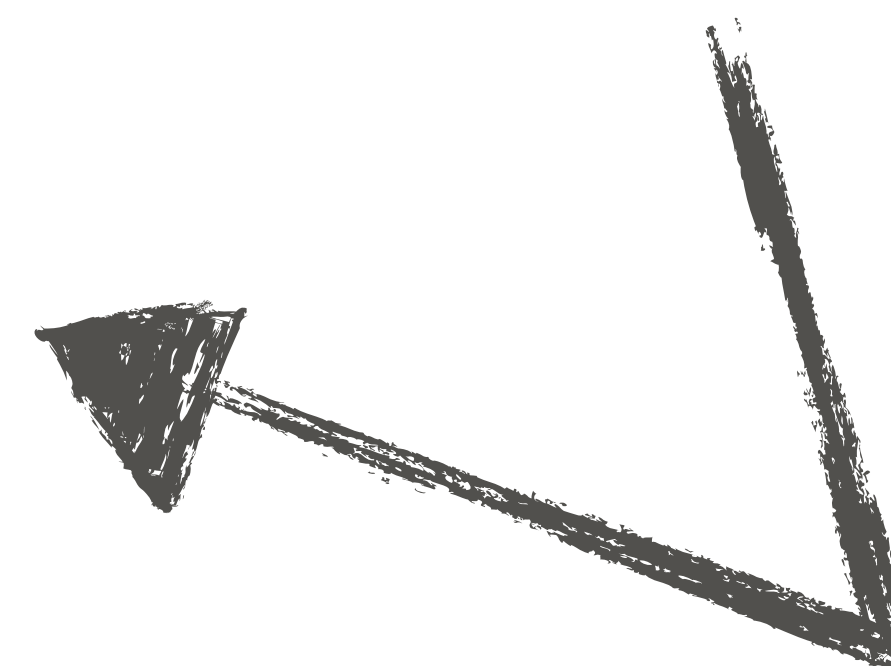
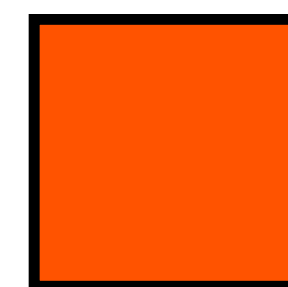
## Finding Area

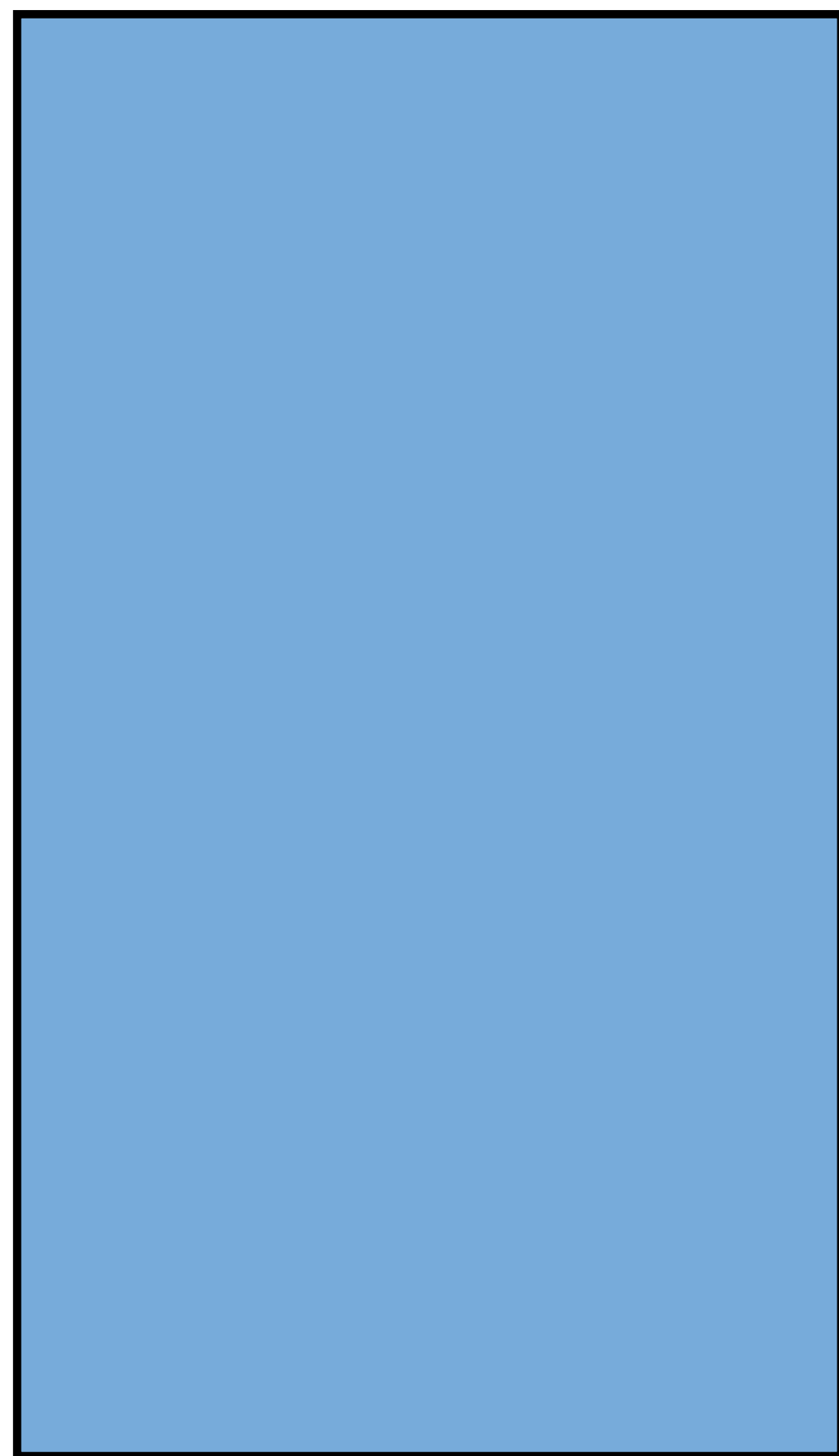
A rectangle has a length of 7 units and a width of 4 units.  
Find the area of the rectangle.



**will it take to  
cover that**

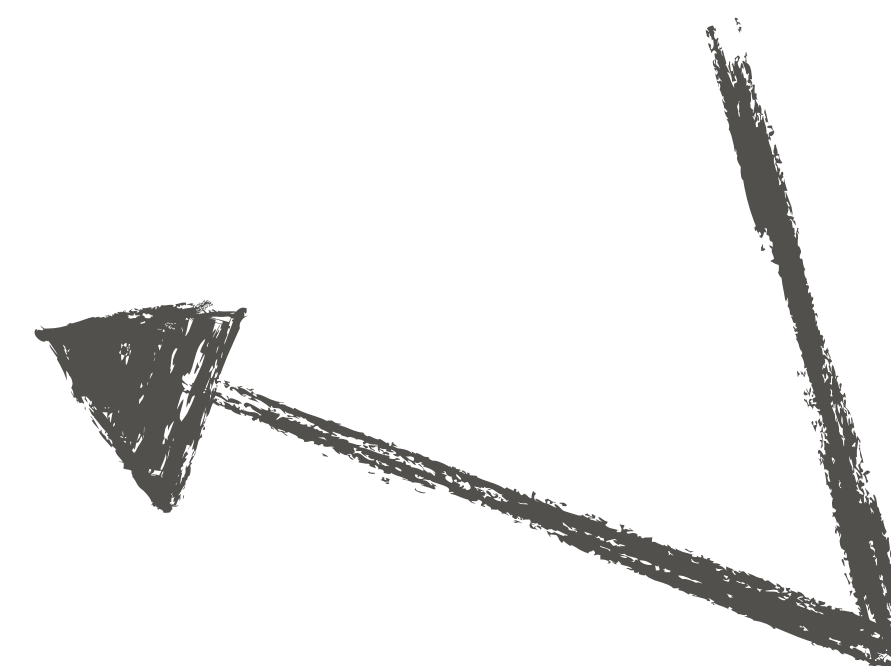
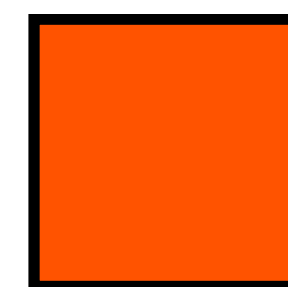
**How many  
of these**





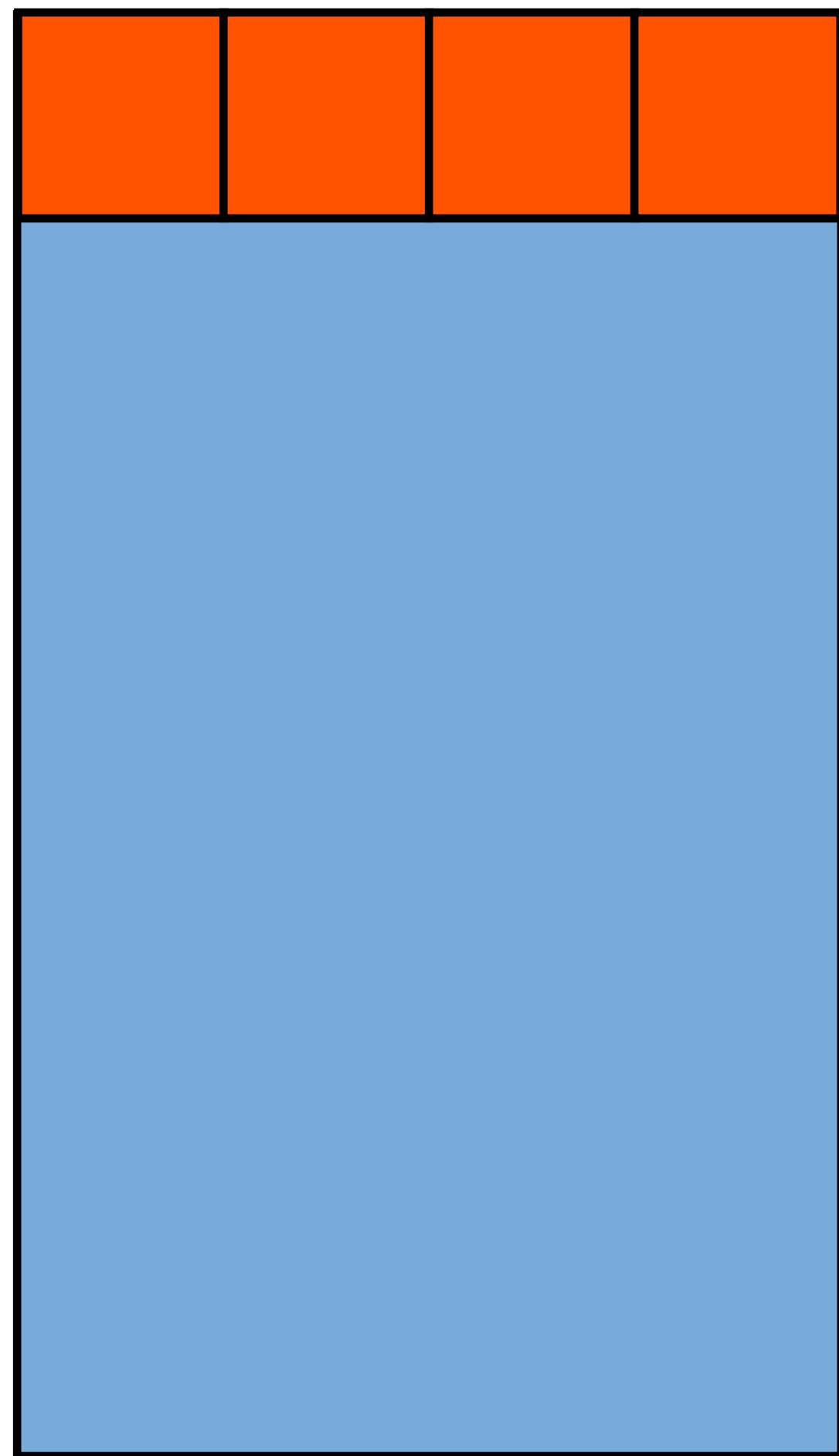
**will it take to  
cover that**

**How many  
of these**



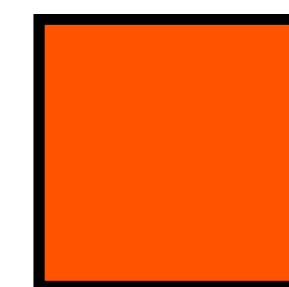
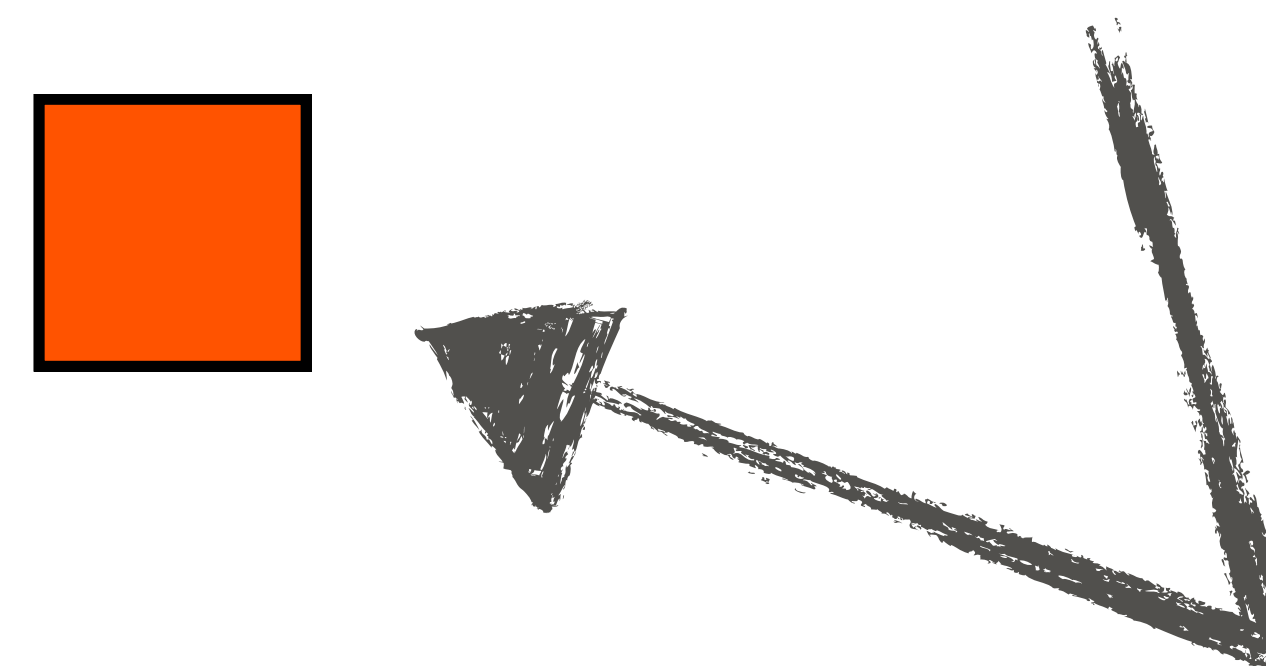
**MAKE AN  
ESTIMATE!**



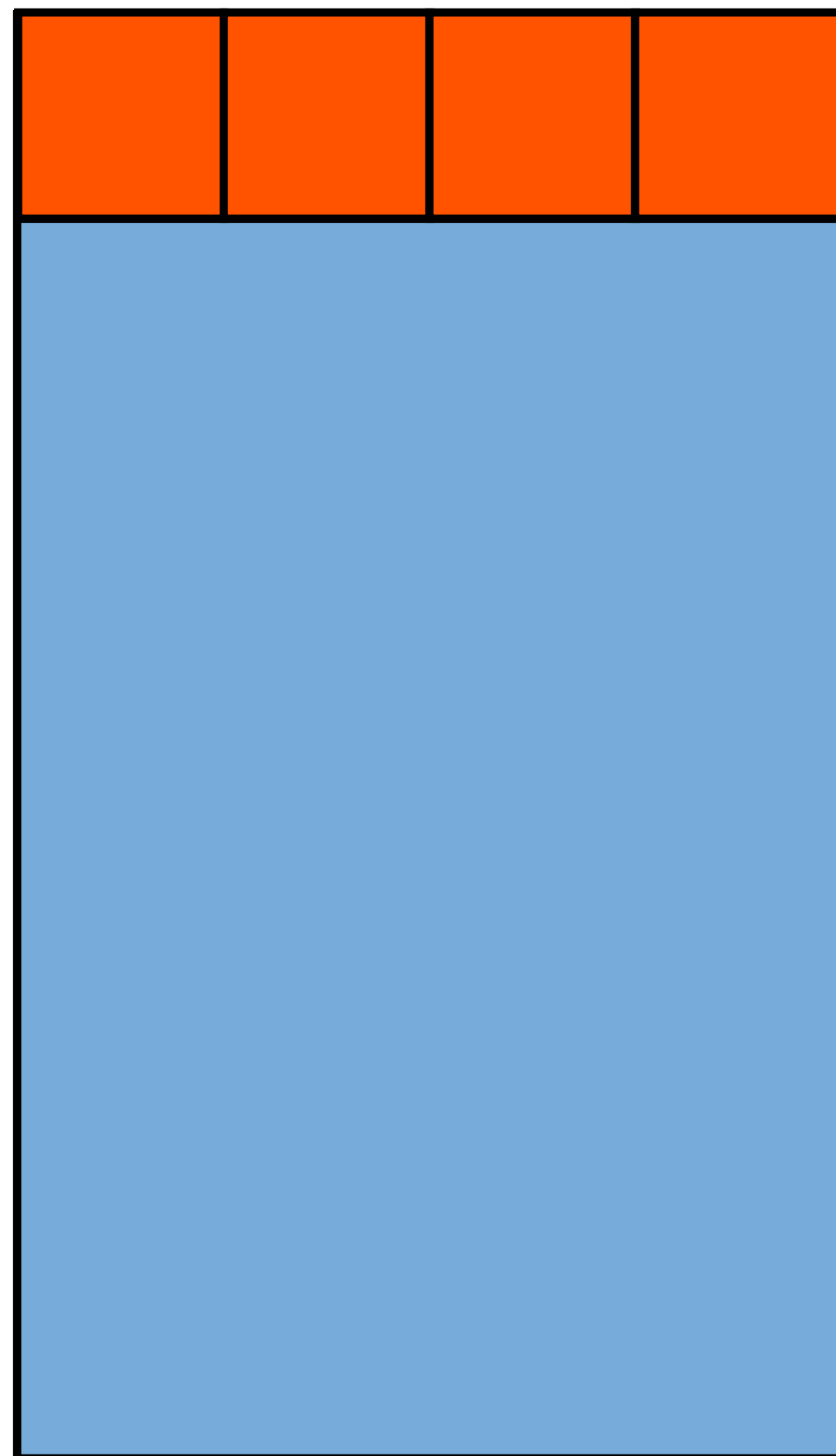


will it take to  
cover that

How many  
of these

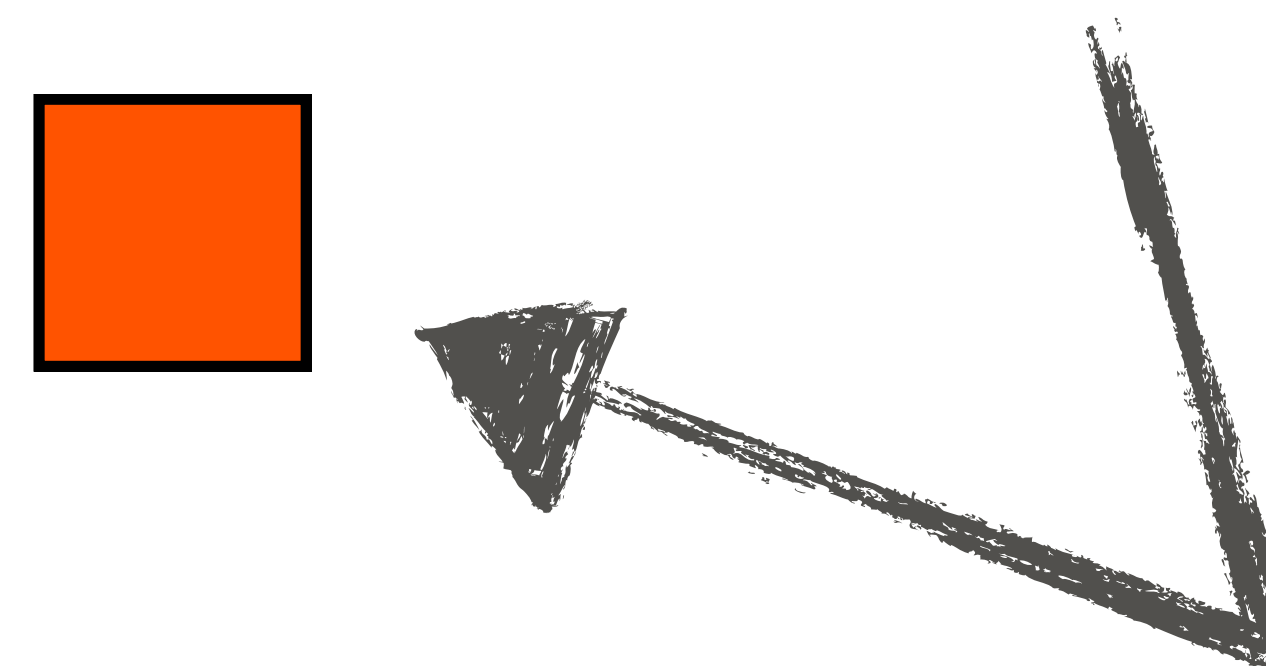


**UPDATE  
YOUR  
ESTIMATE!**



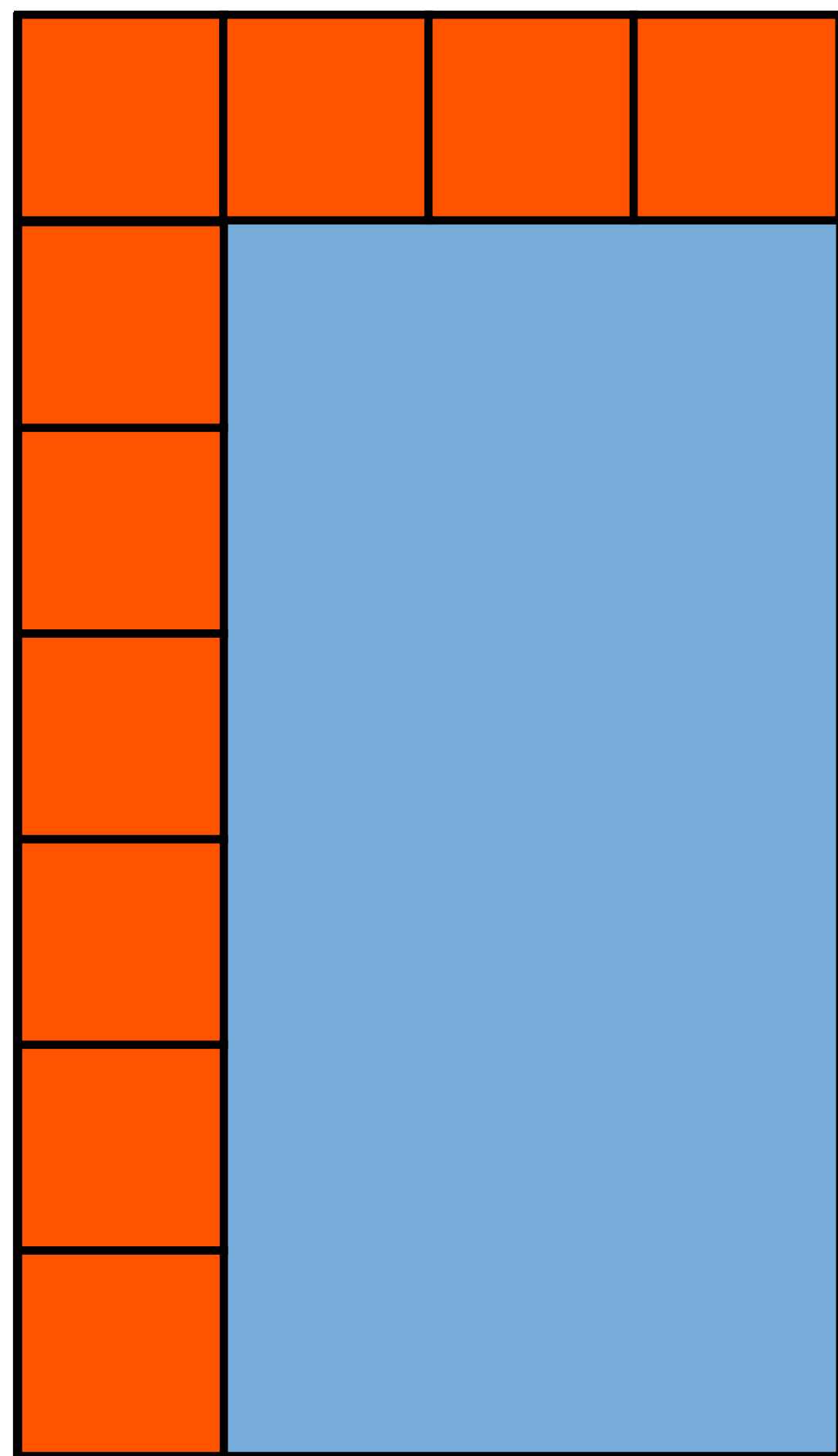
**will it take to  
cover that**

**How many  
of these**

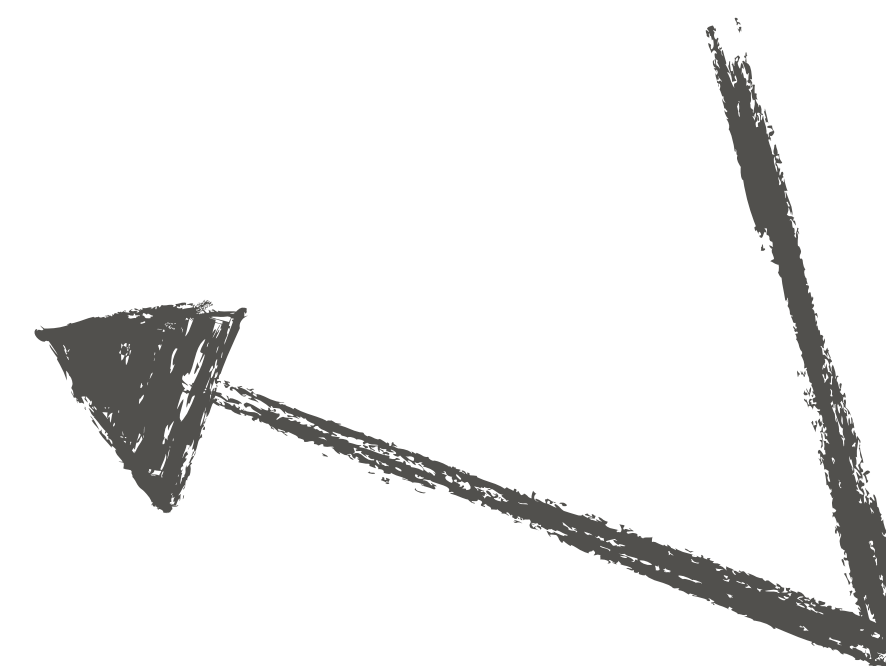
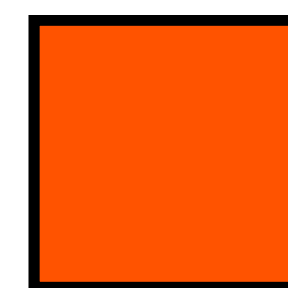


**UPDATE  
YOUR  
ESTIMATE!**

**PAUSE VIDEO**



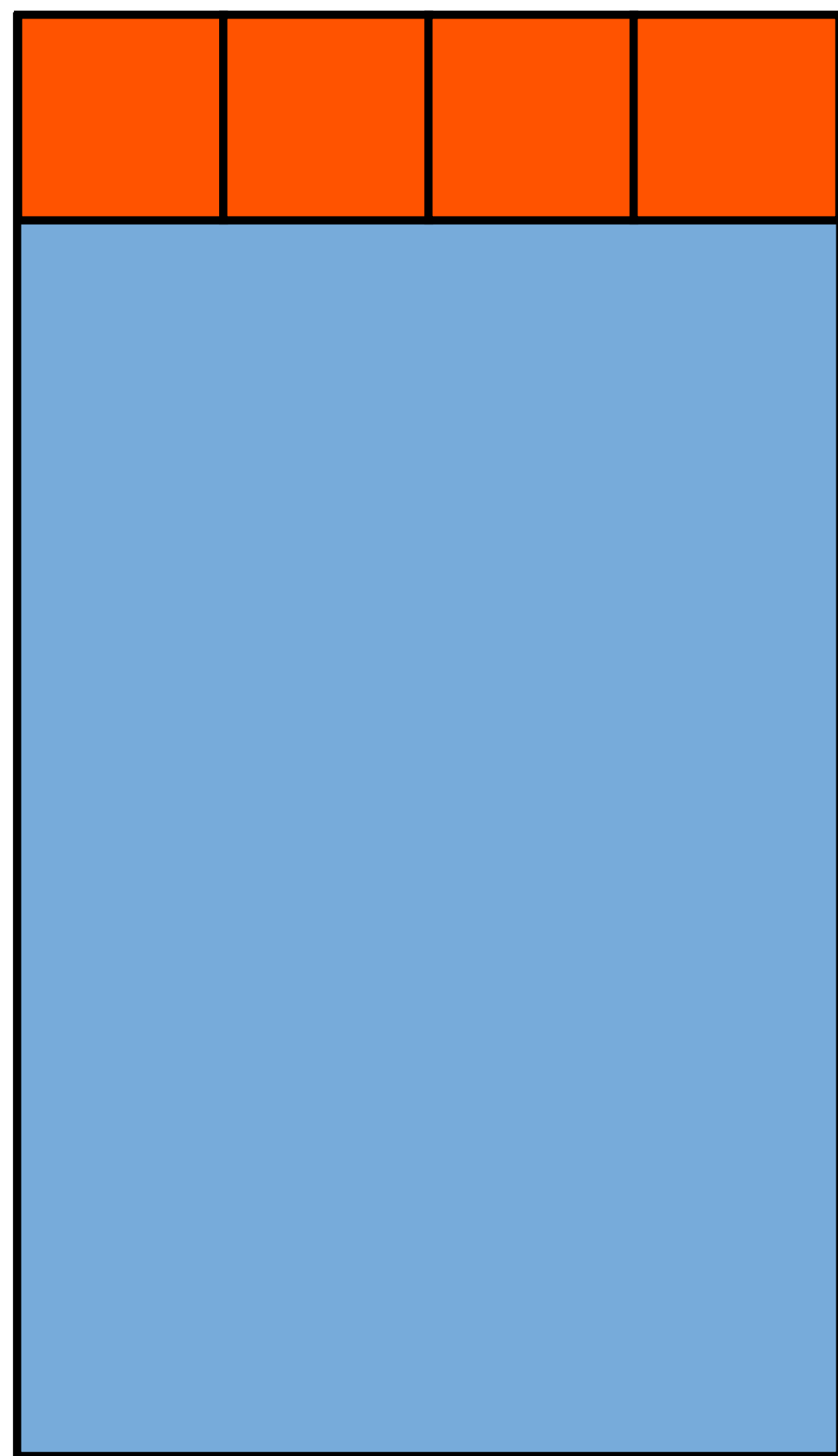
How many  
of these



will it take to  
cover that

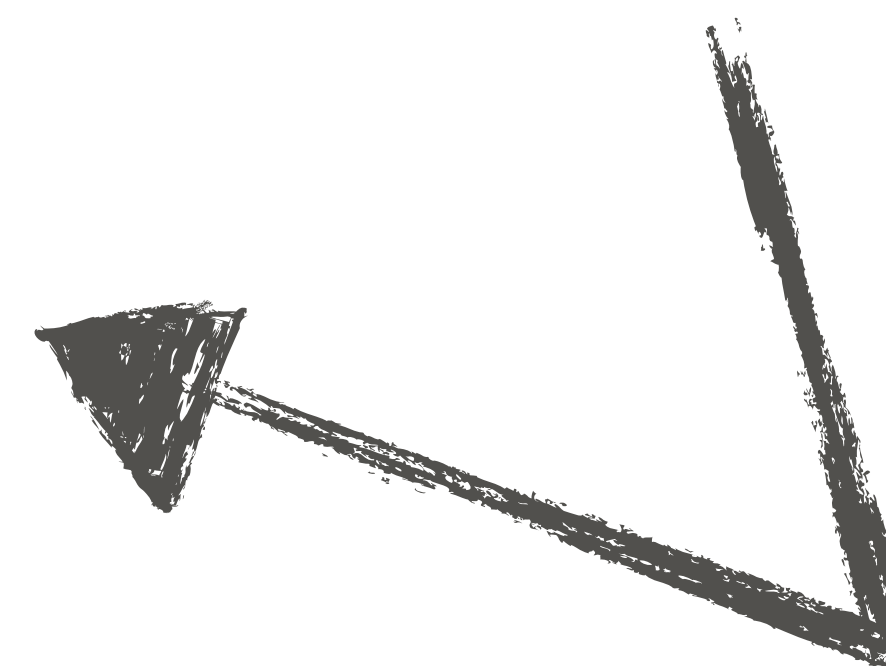
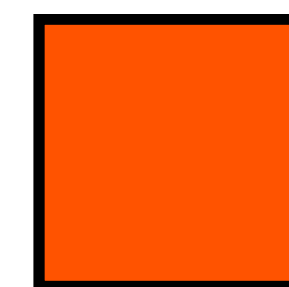
**UPDATE YOUR  
ESTIMATE  
AGAIN!**





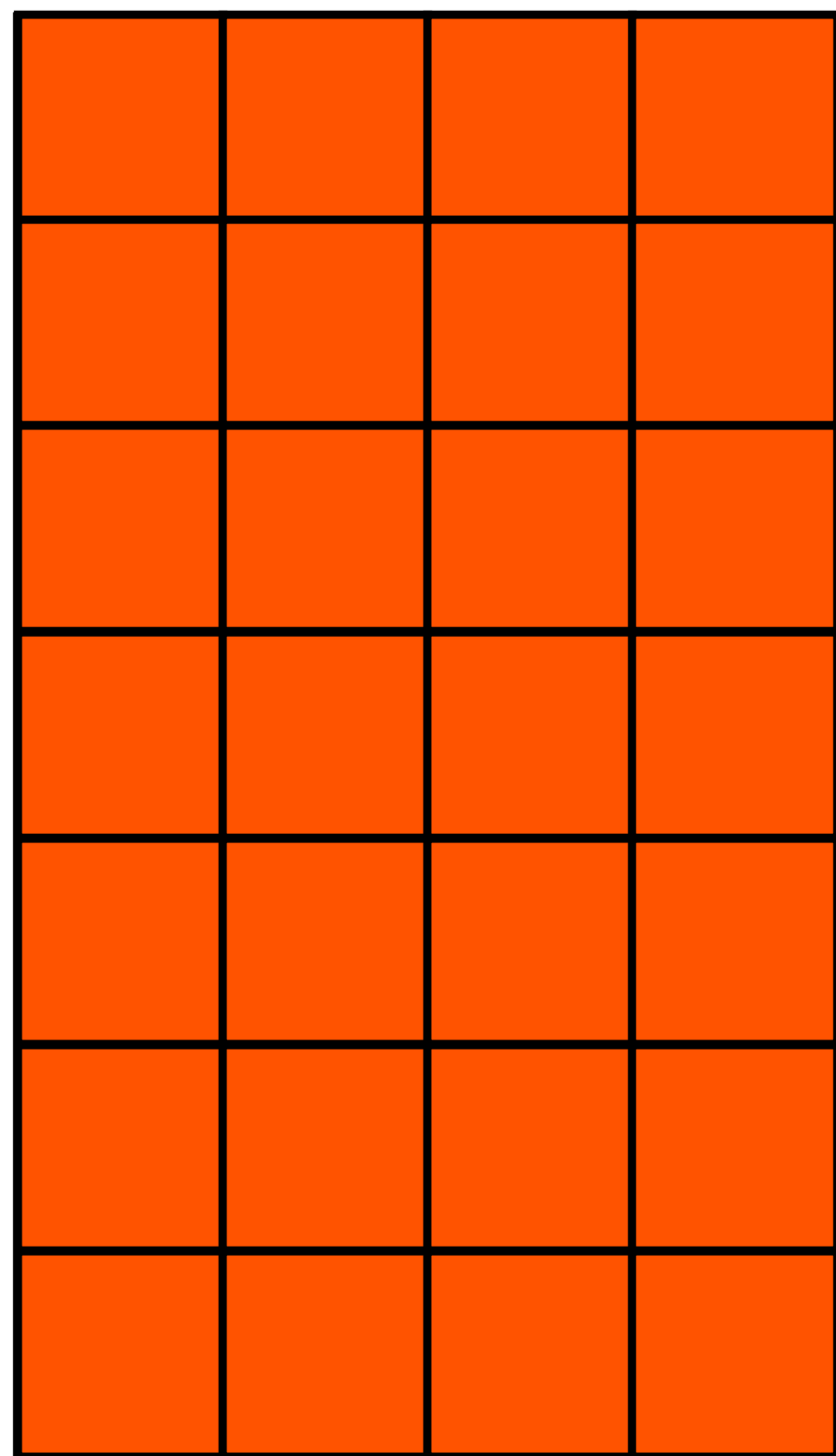
4

How many  
of these

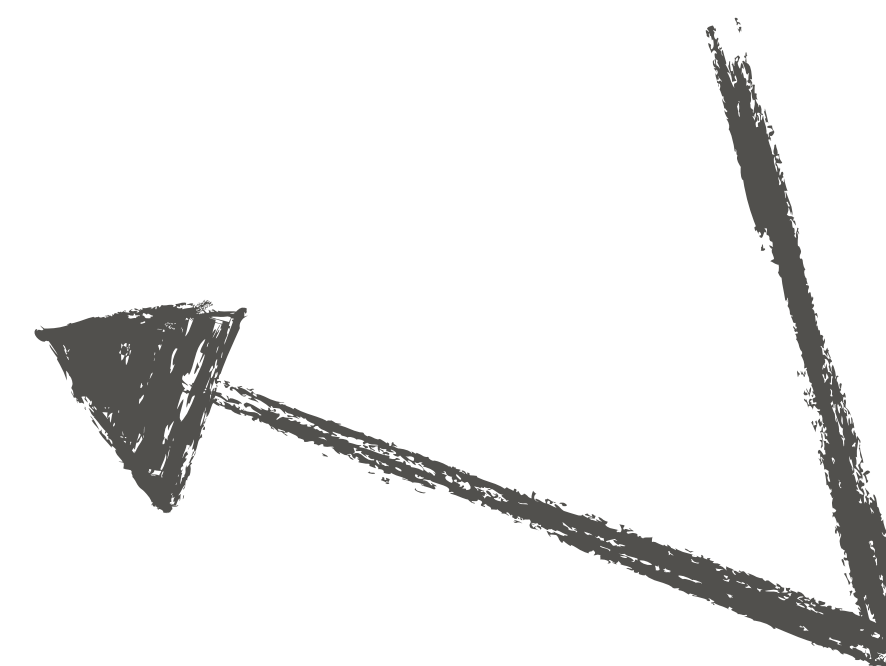
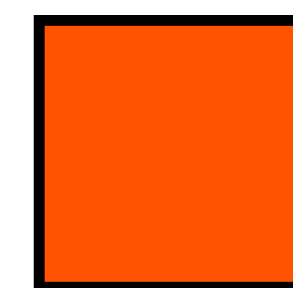


will it take to  
cover that

**UPDATE YOUR  
ESTIMATE  
AGAIN!**



**28** How many  
of these



will it take to  
cover that

**UPDATE YOUR  
ESTIMATE  
AGAIN!**

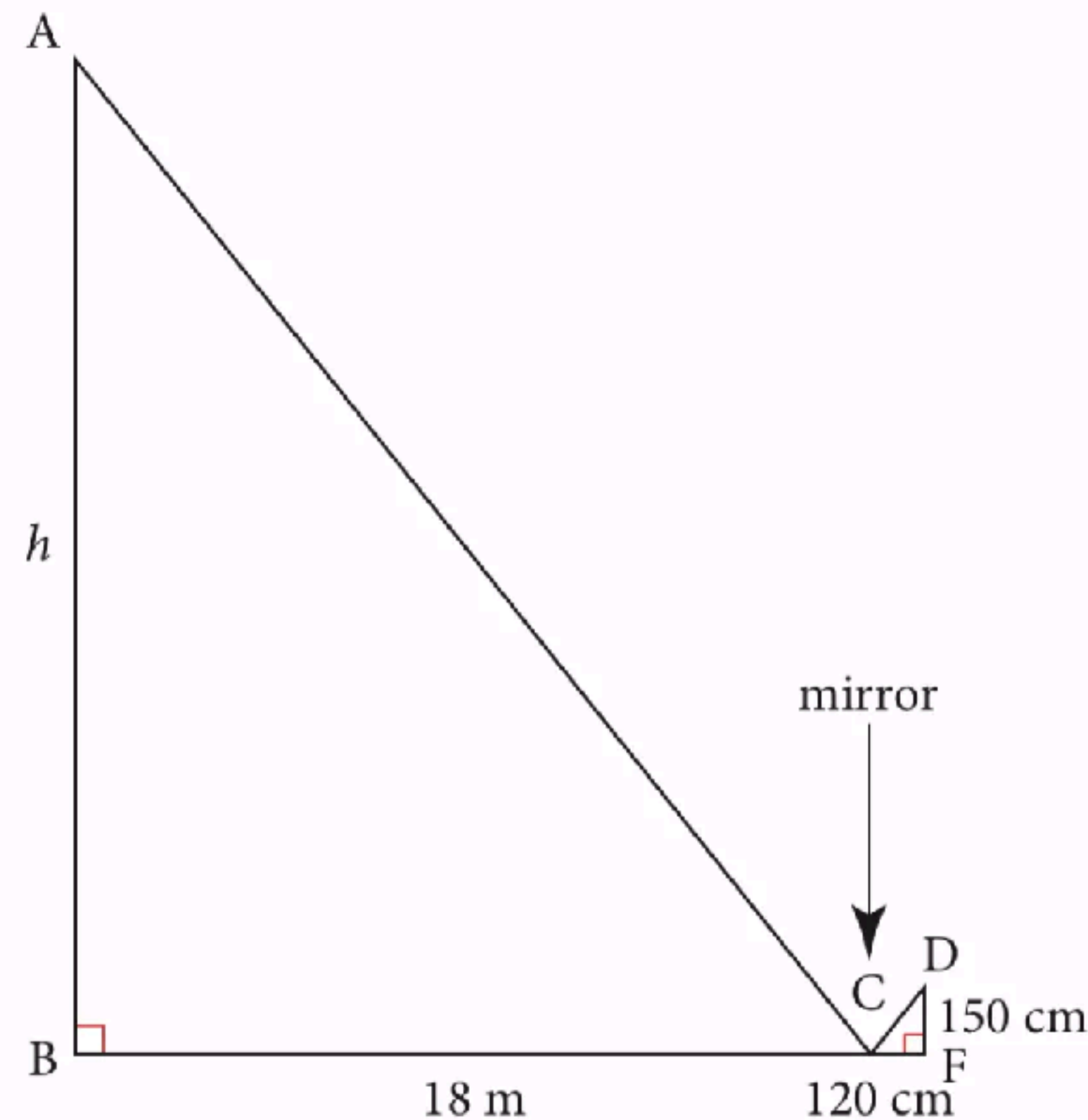
# GOING FROM THIS...

## Example

3

### Use a Mirror to Find Height

Elizabeth's eyes are 150 cm from the floor. She places a mirror on the floor 18 m from the base of a climbing wall. She walks backward 120 cm, until she sees the top of the wall in the mirror. What is the height of the climbing wall?



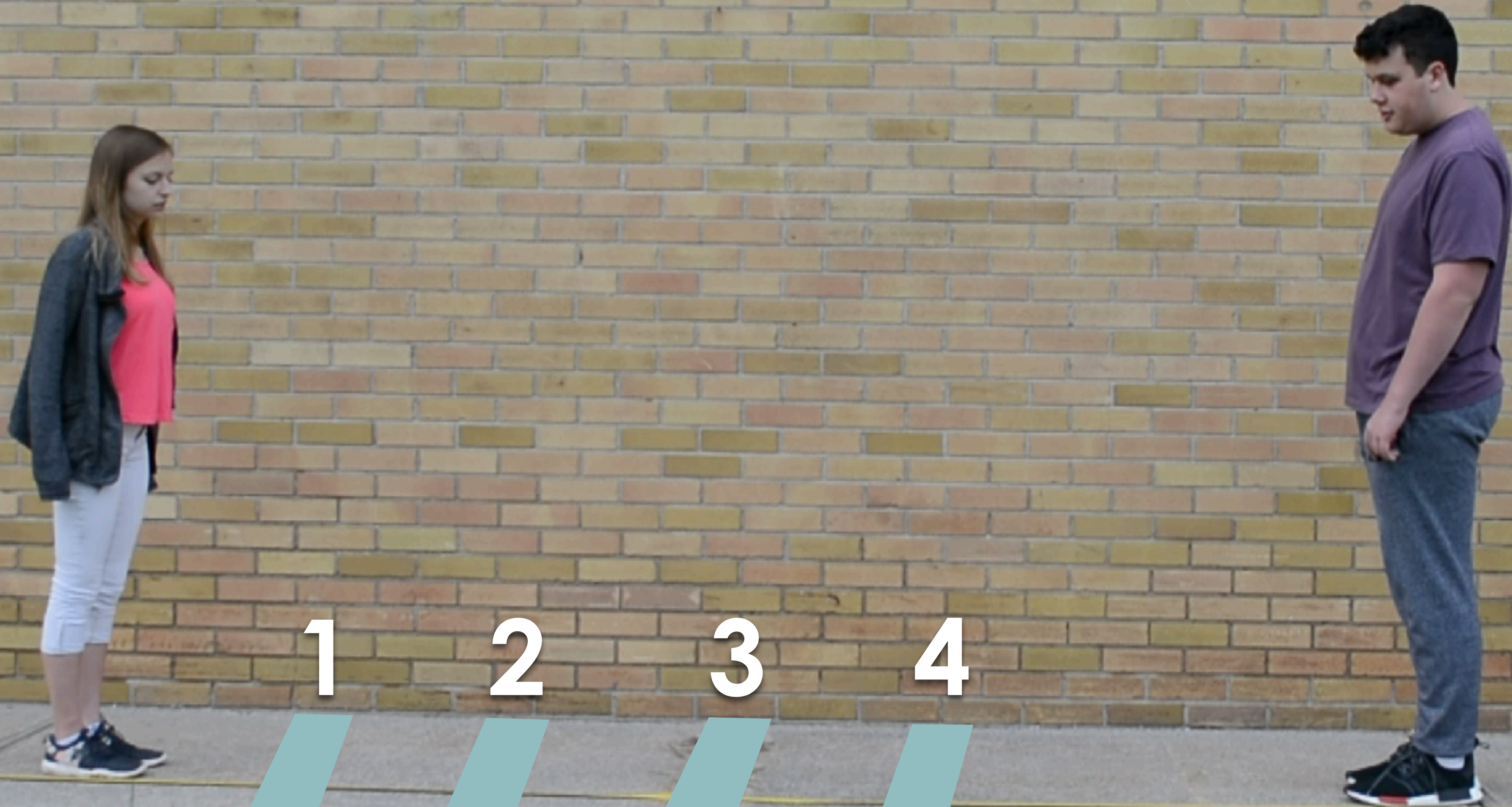


# CAN THEY SEE EYE-TO-EYE IN THE MIRROR?





# WHICH MIRROR CAN THEY SEE EYE-TO-EYE?





WHERE SHOULD DYLAN STAND  
SO THEY CAN SEE EYE-TO-EYE IN THE MIRROR?



152  
cm


150 cm

?

187  
cm



2. A big non-math takeaway, but still school related, is that the teacher really makes the class. Although math was my favourite subject before, throughout the years, I have liked math more and more every year and have found passion in everything I do related to math. A big non-math, non school takeaway is to have confidence in your work. Even though I got most of the math ideas during tests I ~~is~~ used to have a loss of confidence and throughout this year I have ~~learned~~ ~~and~~ obtained a confidence gain in not only math but everything I do.

Thank you for a great year Mr Orr, and everything you taught me. Hiboy 



# STRATEGY #1 AVOID RUSHING TO THE ALGORITHM

STOP PRE-TEACHING

CREATE A PRODUCTIVE STRUGGLE

START LISTENING & OBSERVING

[makemathmoments.com/usnc](http://makemathmoments.com/usnc)

4

**LOWER THE STAKES**  
In order for students to take risks and learn how to persevere the stakes for failure have to be low. It has to be painless to make mistakes. How are we doing this in our math classes? **PRO-TIP:** Risk-taking low stakes is to be permanent of the boards n things. Students can attempt You can read more about th Peter Liljedahl. <http://www.p>

5

**SHOW WHAT YOU KNOW**  
Create an assessment routine. Students quickly learn what we value the process of their we prove it to them? Your a room to show that they have **TIP:** Learn how you can imp promotes growth and resilie <http://makemathmoments.co>

## HOW TO AVOID RUSHING TO THE ALGORITHM

So you can build resilient problem solvers

1

**FOLLOW THE CURIOSITY PATH**  
Sparkling curiosity is your first step to building resilient problem solvers. Students' curiosity must be peaked if they are going to stick with the problem. By withholding information to create anticipation and moments of noticing, wondering and estimation is the sure fire way to spark that curiosity! **PRO-TIP:** Cover up information in the problem. Reveal it as students ask for it!

2

**LIMIT PRE-TEACHING**  
The most common mistake teachers make is to pre-teach all of the content up front so that students have the skills you want them to use in the problem. Avoid pre-teaching and allow students to attempt using their own strategies first. Your class will atmosphere will transform. Students will feel that their ideas are valued. **PRO-TIP:** Use random groupings so students can share their strategies with peers.

3

**MAKE THE UNFAMILIAR FAMILIAR**  
Routinely have students solve unfamiliar problems through a supportive productive struggle process. We assume that students will just be good problem solvers but when do we every teach them HOW to be problem solvers. They need practice with support being in tough situations that turn out positive. As an example, if I didn't push my students to solve these problems routinely on their own to start our lesson then they would not only miss gaining the experience to persevere but I the teacher would also miss gaining valuable information about what my students know or don't know. **PRO-TIP:** Be consistent. Problem solving must be a regular part of learning not just a once a unit or end of unit thing.

YOU MIGHT BE WONDERING...

HOW?



# STRATEGY #2

GIVE YOUR STUDENTS AN  
ALL ACCESS PASS

## STRATEGY #2 GIVE YOUR STUDENTS AN ALL ACCESS PASS

High-Ceiling

**TASKS**

Low-Floor

## Supply and Demand

Rachelle is an economist. She evaluates the effect of changing the price on the supply and the demand for a product. The selling price in dollars,  $y$ , of a product is related to the number of units sold,  $x$ , according to these equations:

$$\text{Demand: } y + 0.4x = 10$$

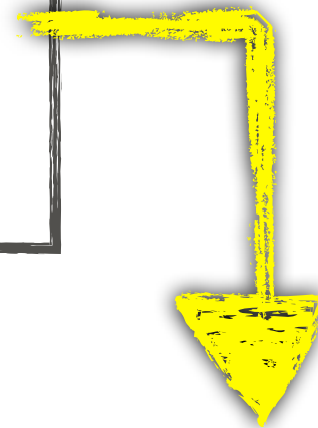
$$\text{Supply: } y = 0.6x + 2$$

Solve this system algebraically. What does the solution represent?

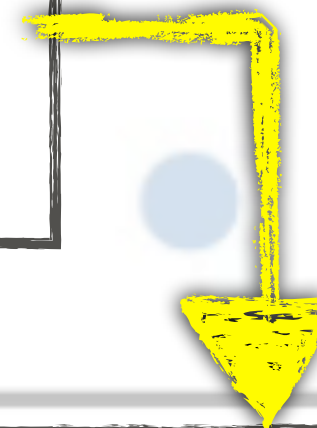




**WITHHOLDING  
INFORMATION**



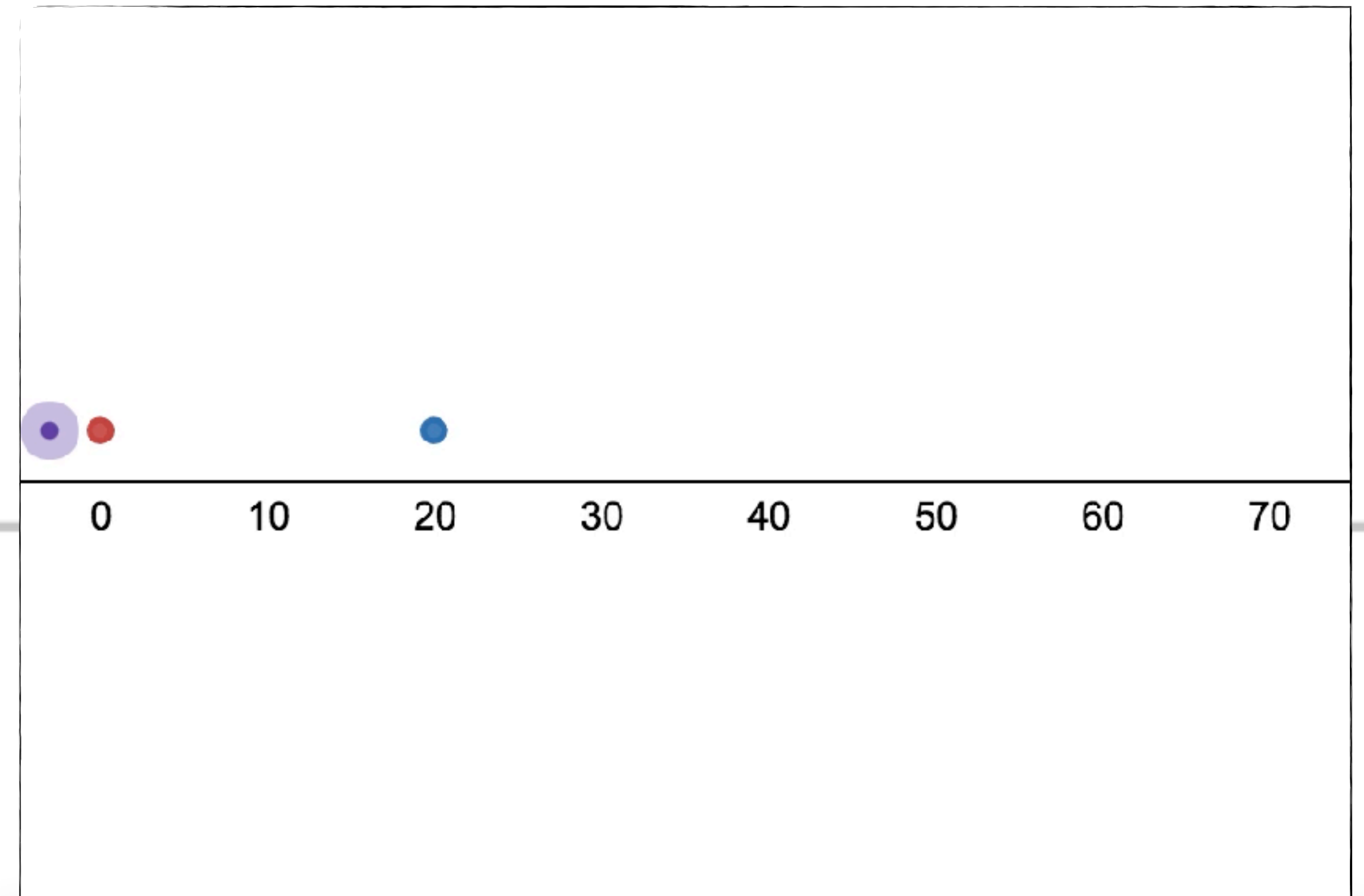
**ANTICIPATION**



**NOTICE &  
WONDER**



**ESTIMATION**



“



*The **SUCCESS** of a Notice and Wonder hinges on how effectively the task creates the feeling of **ANTICIPATION** through the **WITHHOLDING OF INFORMATION**.*

”

**WITHHOLD  
INFORMATION  
TO CREATE  
ANTICIPATION**

# CURIOSITY PATH

 WITHHOLDING INFORMATION

 ANTICIPATION

 NOTICE & WONDER

 ESTIMATION

## THE CURIOSITY PATH

4 Elements that help you spark curiosity in math class


- 1 Withholding Information**  
Withholding information is the key to creating a curious moment. When we give students all of the information upfront, we suck out ALL of the opportunity for curiosity. Hold back or cover up the necessary information in a math problem. Reveal it slowly or when students demand it.
- 2 Anticipation**  
By withholding information we create ANTICIPATION. When we leave students with an opportunity to anticipate where this problem is going, we are persuading our students to come along with us on a math learning journey. If we can effectively bring students down to earth every day, we will have created math memories.
- 3 Notice & Wonder**  
This is where we as the author of this math problem and thinking of our students to remove social barriers that may exist between one student and another. Students are sharing anything and everything. Judgement from peers or the teacher in a classroom culture necessary for students to have the noticings and wonderings that can be their facilitation skills to land on some question. A predetermined learning goal for the day.
- 4 Estimation**  
Just like in the notice and wonder stage, students make predictions and they are given an opportunity to develop their adaptive reasoning skills. They justify and articulate their predictions and

Making Math Moments That Matter — Curiosity Path Template

### CURIOSITY PATH TEMPLATE

CURIOSITY PATH PLAN:

How might you gradually share the information in this problem to engage your students?



 CURIOSITY PATH

☐ WITHHOLDING INFORMATION

☐ ANTICIPATION

☐ NOTICE & WONDER

☐ ESTIMATION

 @mathletepearce — Looking for feedback? Contact us —  @MrOrr\_Geek

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# STRATEGY #3

BE MORE PRINCE

# STRATEGY #3 BE MORE PRINCE







From: [foreverence.com/legends/](https://foreverence.com/legends/)



# **TOOLS** & **REPRESENTATIONS**



# CURIOSITY PATH

● WITHHOLDING INFORMATION

● ANTICIPATION

● NOTICE & WONDER

● ESTIMATION

RUSHING TO  
ALGORITHMS

MEMORABLE  
**MATH** MOMENTS

# TOOLS AND REPRESENTATIONS

## TOOLS for THINKING & REPRESENTING THINKING

Making intentional use of:

- ❑ Mathematical Models with “legs” (Alex Lawson)
- ❑ “Power Tools” (Cathy Fosnot)



What do you...

**NOTICE?**

**WONDER?**



What Do You...



Notice?

Wonder?



# What Do You...



## Notice?

## Wonder?



# How many doughnuts are there?



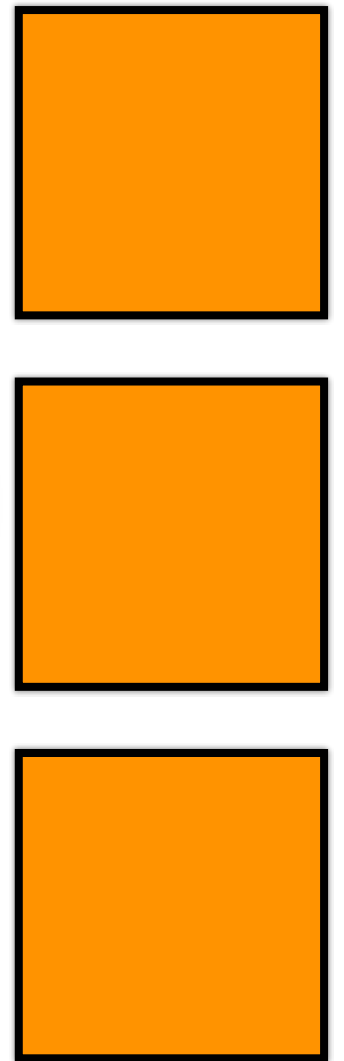
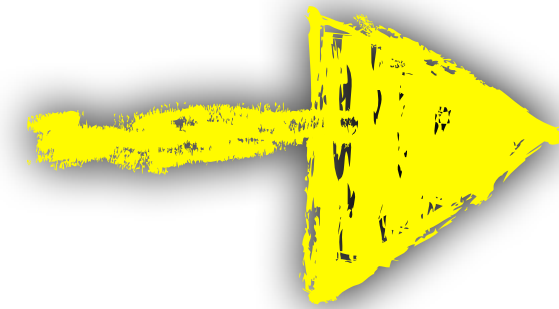
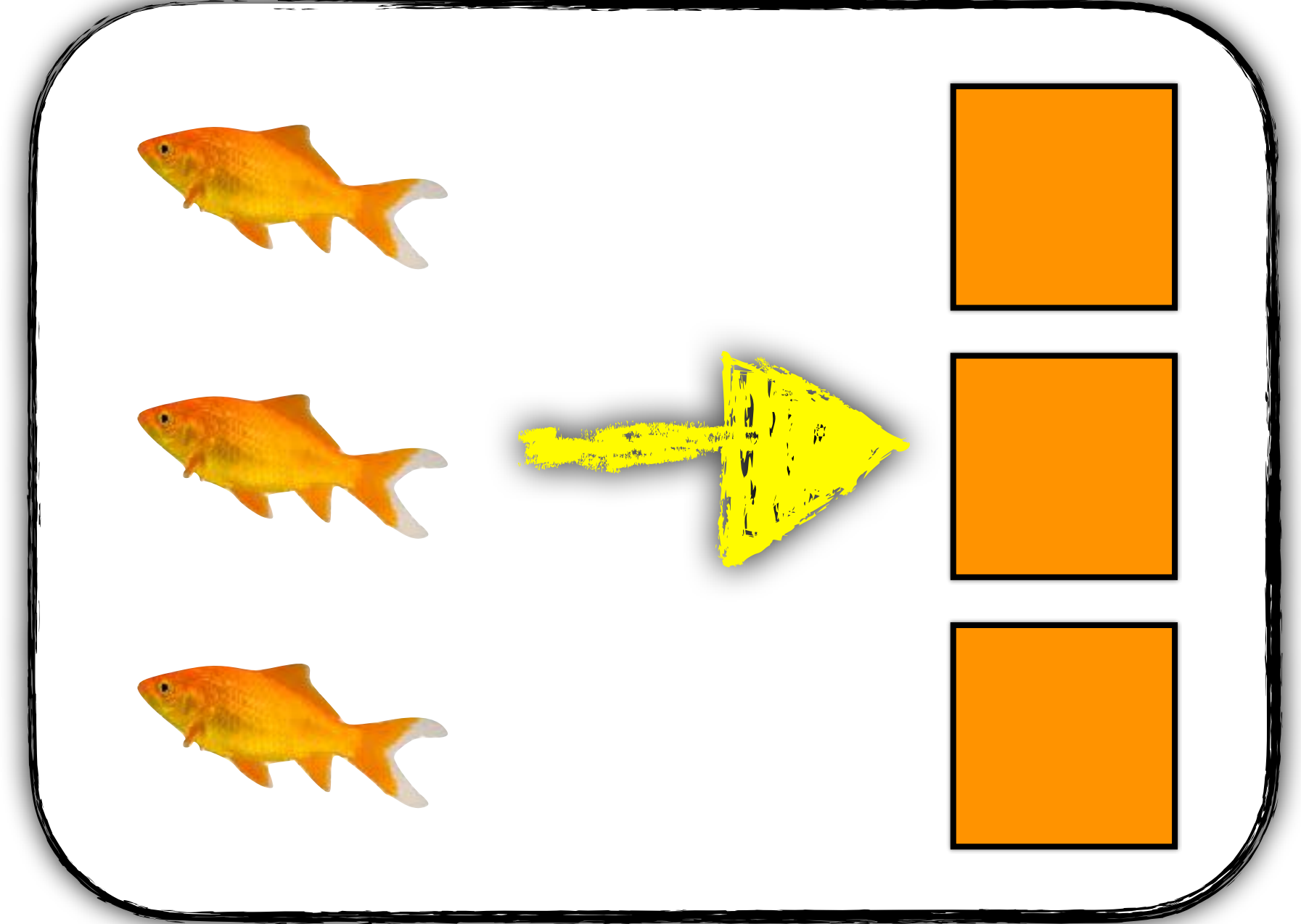
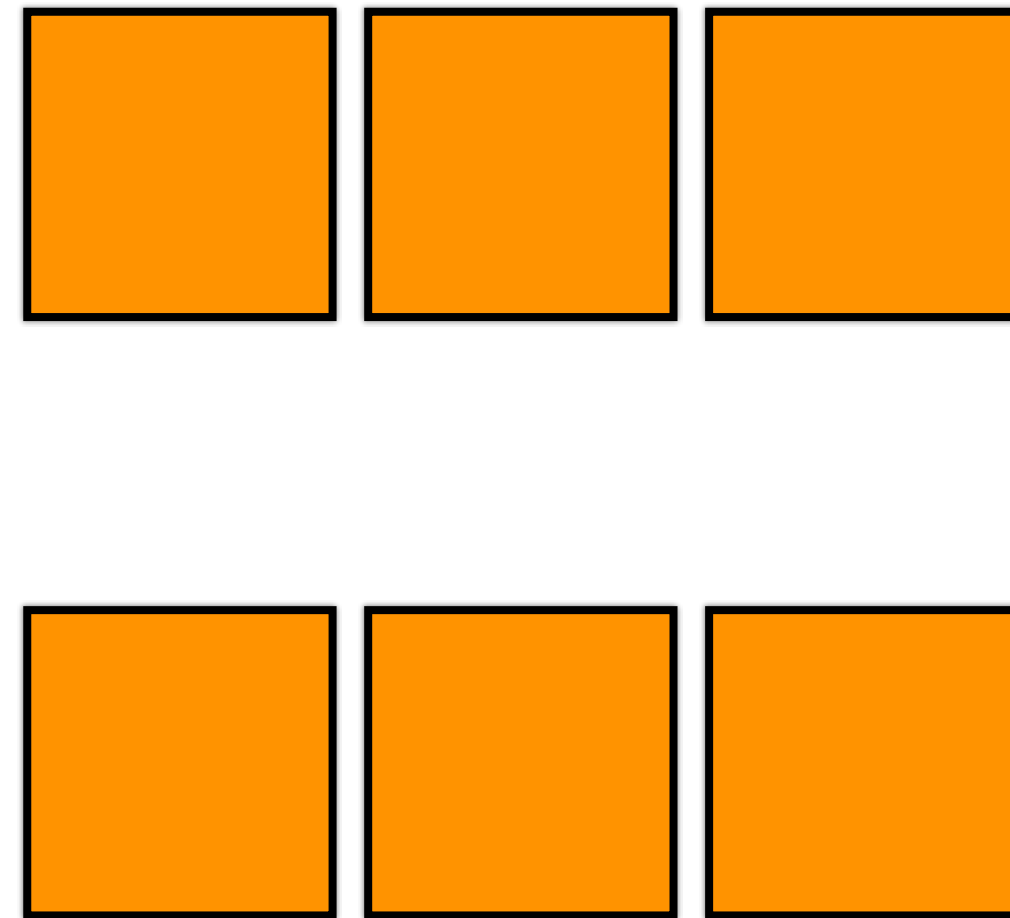
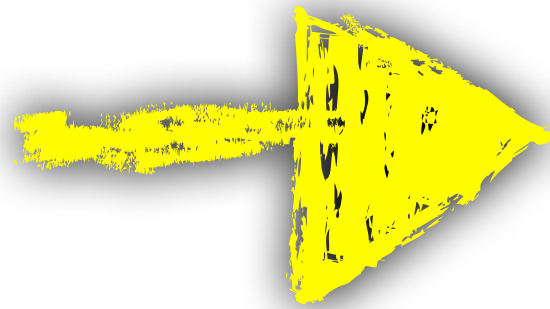
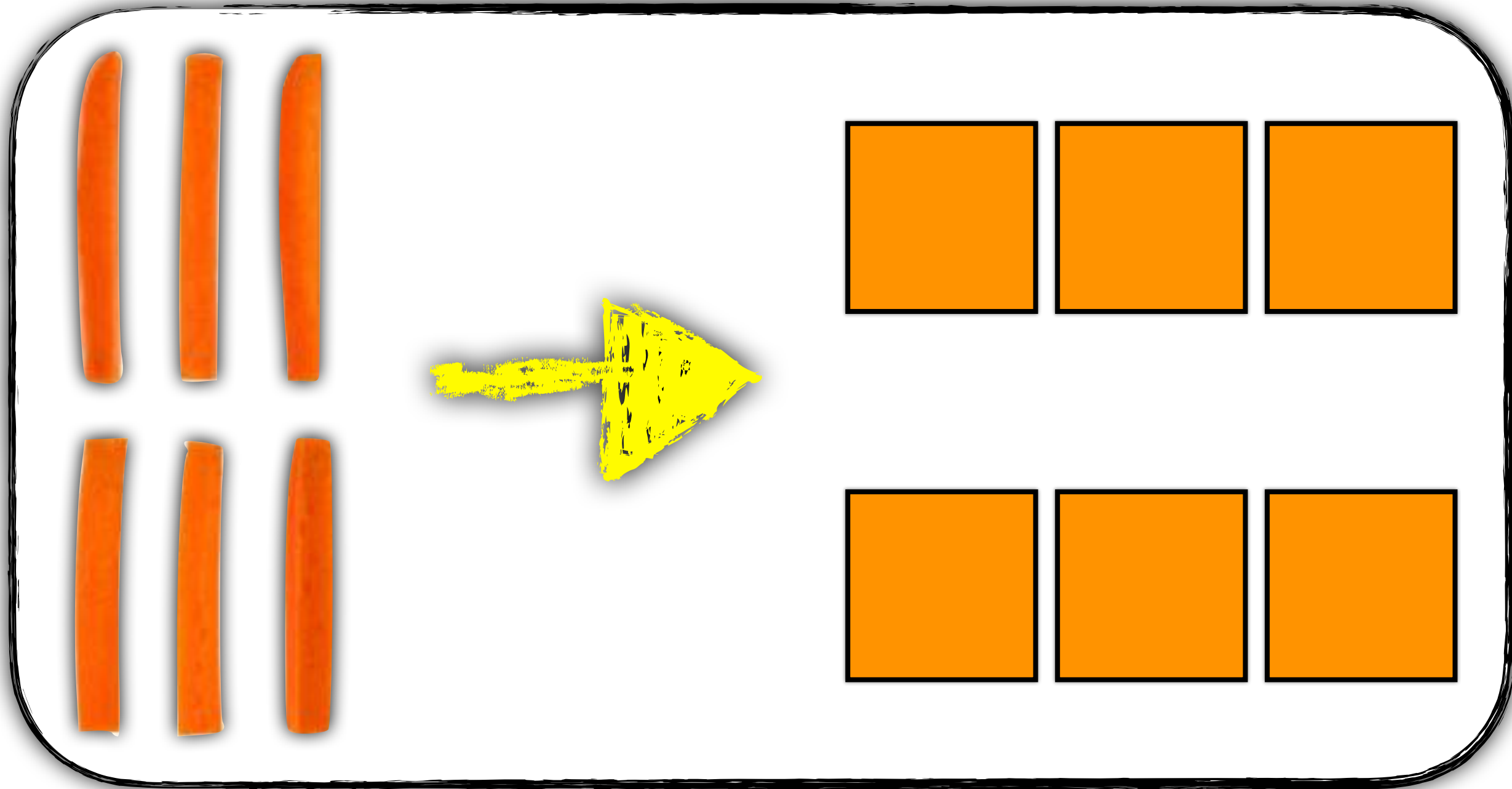
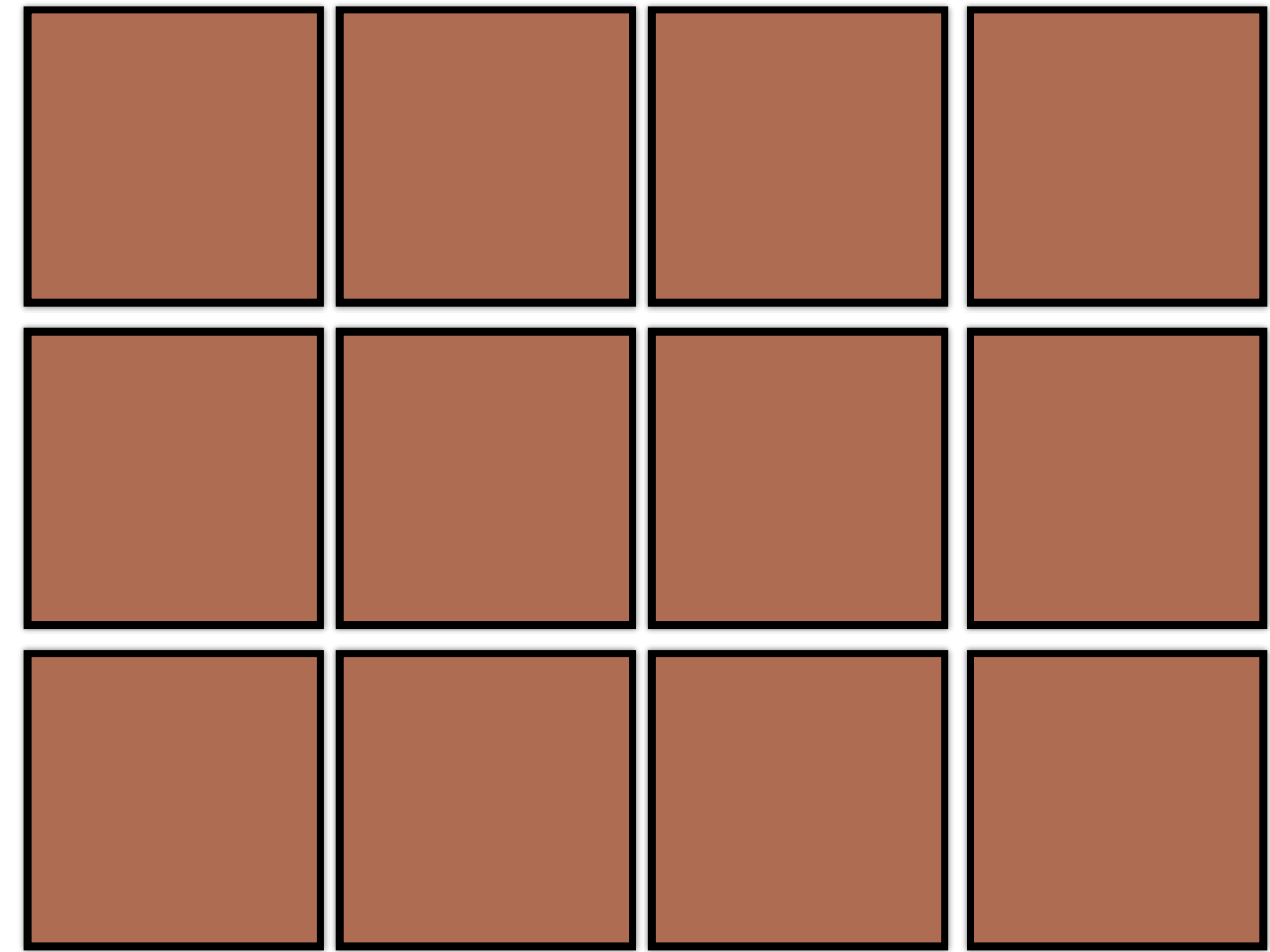
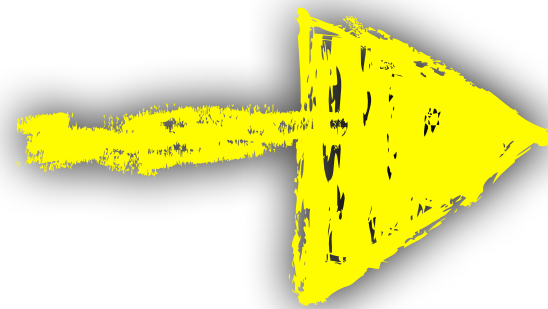


# Update Your Prediction



**How many doughnuts are there?**







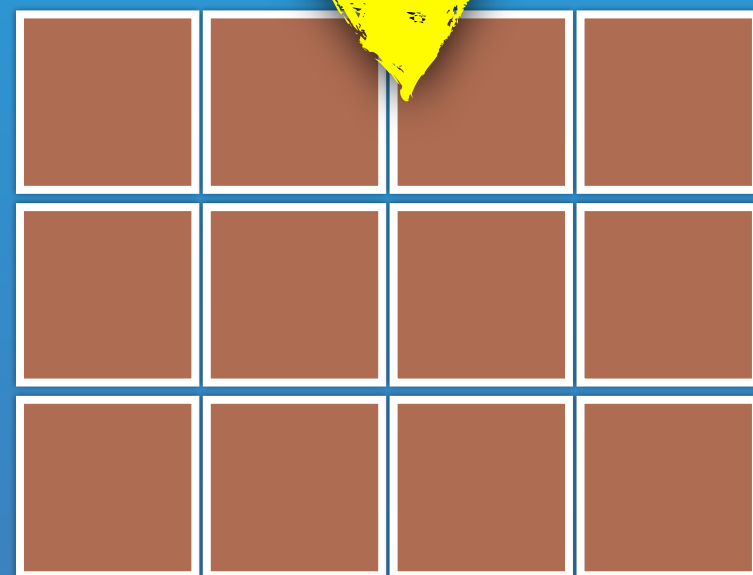
# Concreteness Fading

How many donuts are in 4 boxes of 12 donuts?

## 1 Concrete

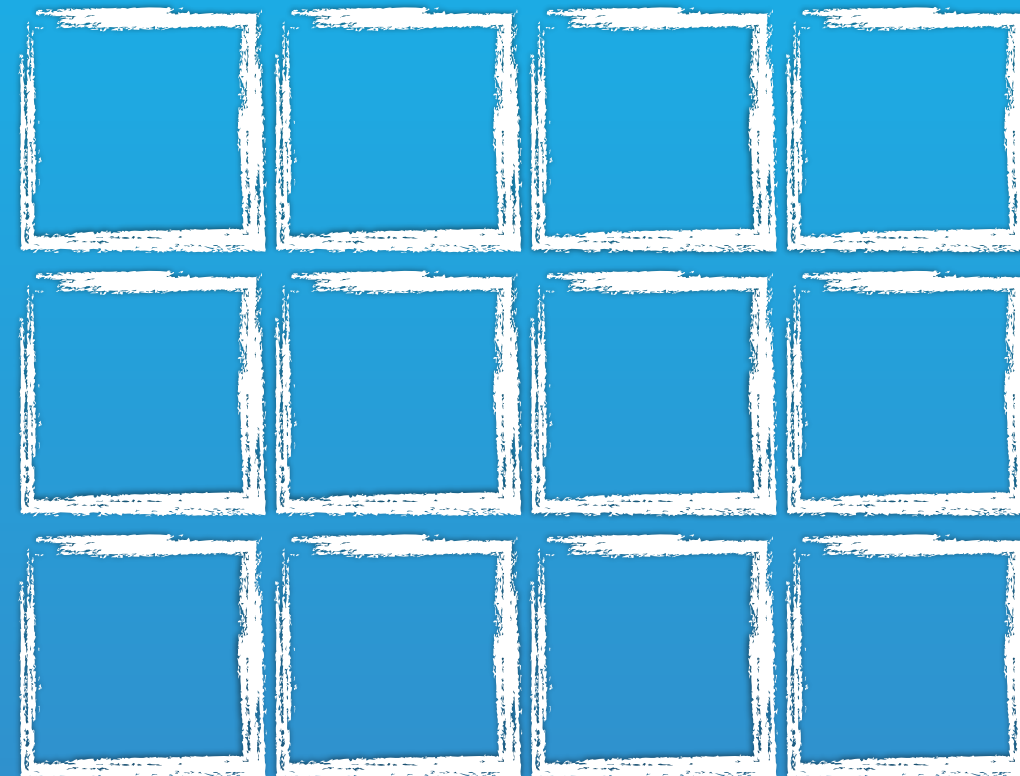


Actual  
Doughnuts



Concrete  
Manipulatives

## 2 Visual



Drawings and  
Diagrams

## 3 Abstract

3 groups of  
4 doughnuts  
is equal to  
12 doughnuts

Symbolic


$$3 \times 4 = 12$$



# How many doughnuts are in 3 boxes?





# How many doughnuts are in 3 boxes?

36

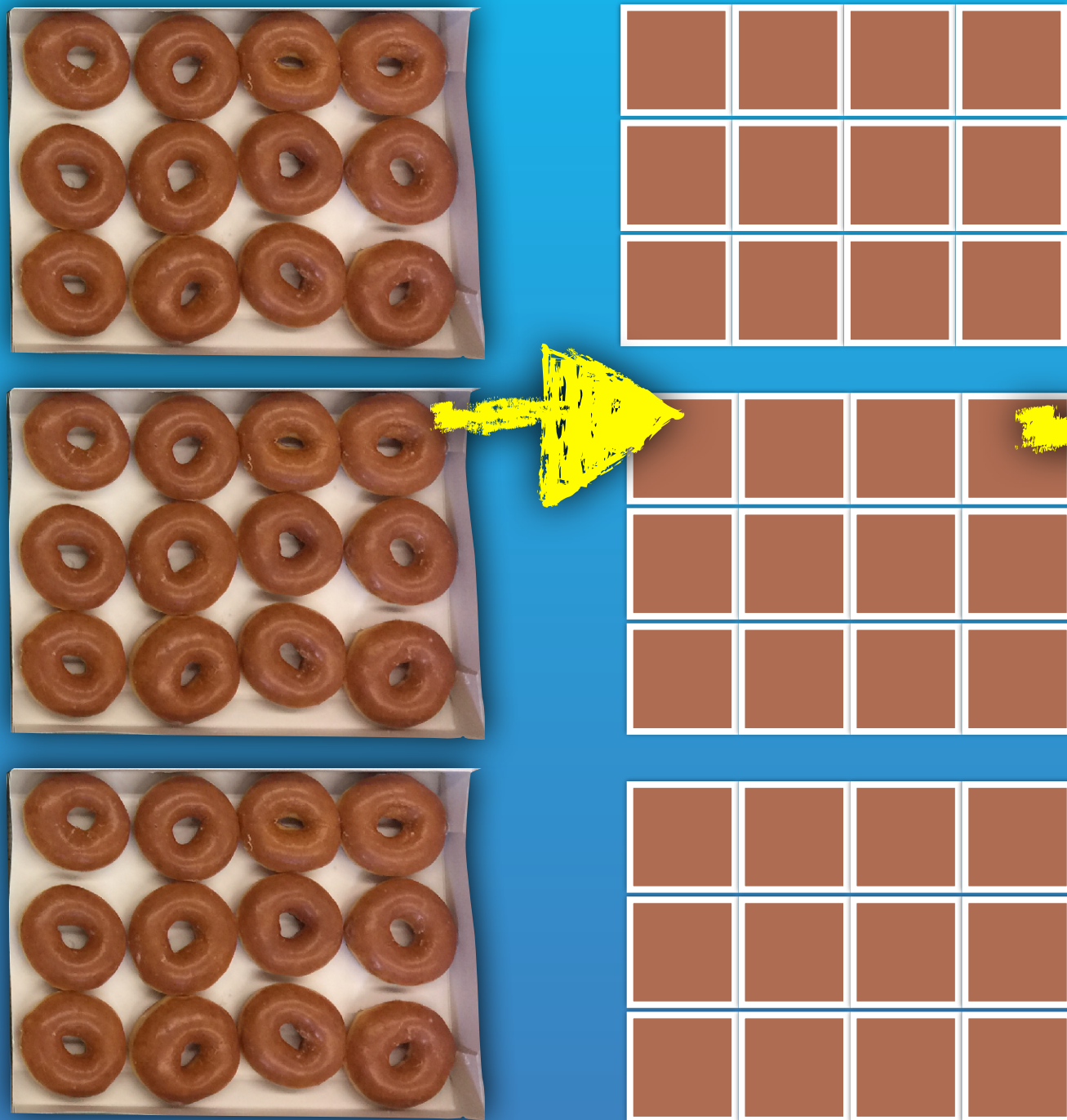




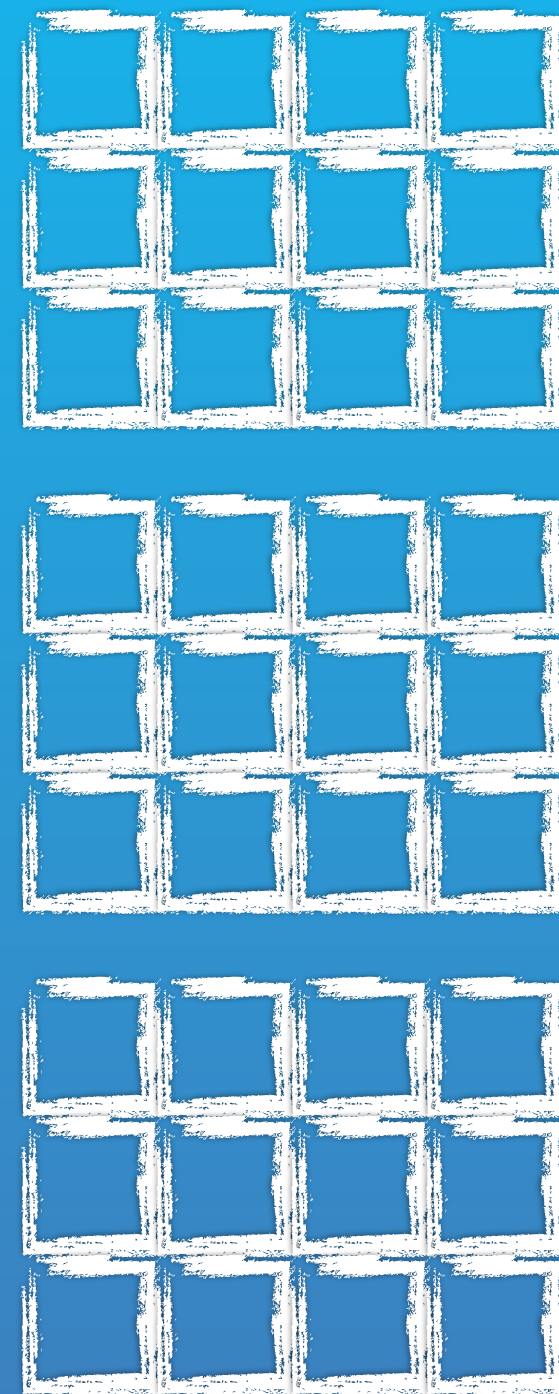
# Concreteness Fading

How many doughnuts are in 3 boxes of 12 donuts?

## 1 Concrete



## 2 Visual



## 3 Abstract

3 groups of  
12 doughnuts  
is equal to  
36 doughnuts


$$3 \times 12 = 36$$

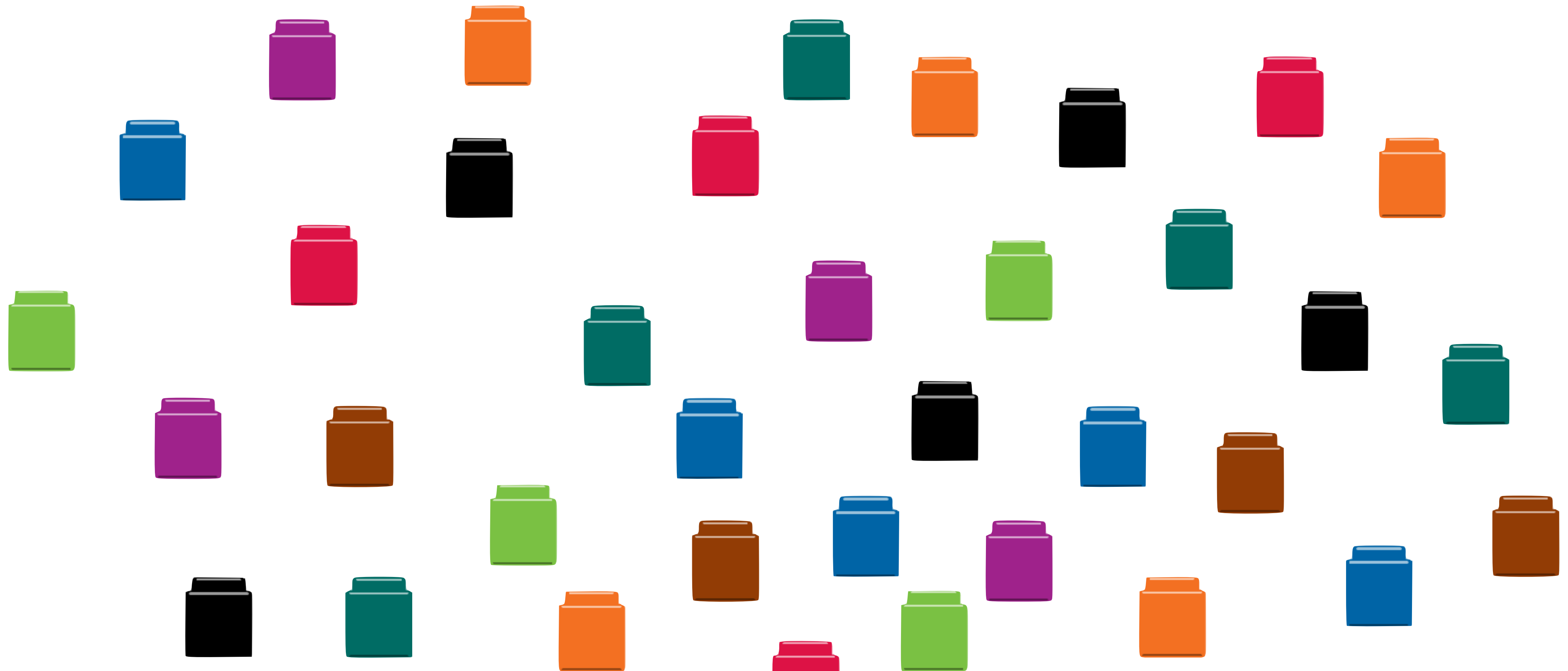


**There are 36 doughnuts in 3 boxes.  
How many doughnuts are in 7 boxes?**





There are 36 doughnuts in 3 boxes.  
How many doughnuts are in 7 boxes?





There are 36 doughnuts in 3 boxes.  
How many doughnuts are in 7 boxes?



There are 36 doughnuts in 3 boxes.  
How many doughnuts are in 7 boxes?



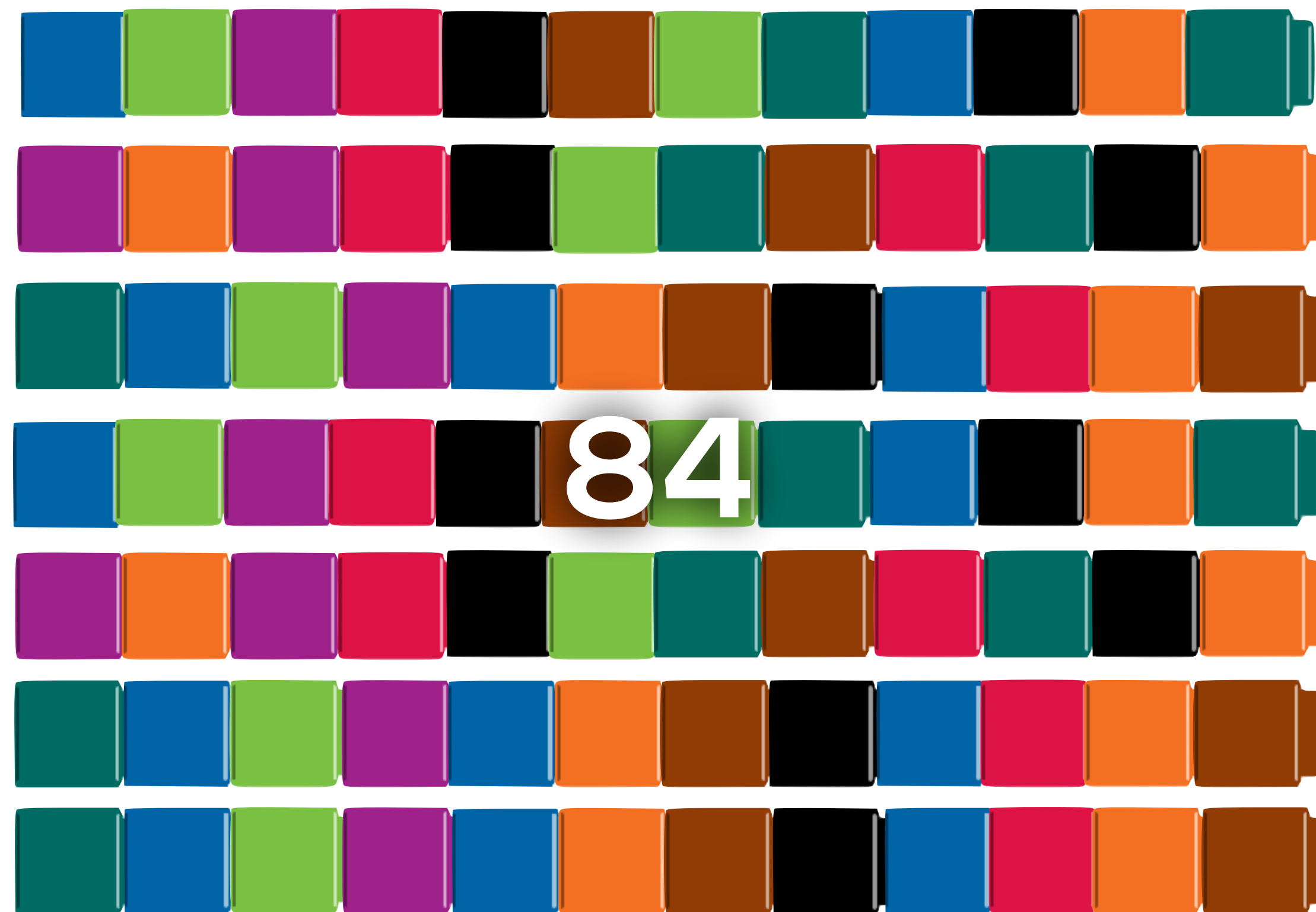


There are 36 doughnuts in 3 boxes.  
How many doughnuts are in 7 boxes?

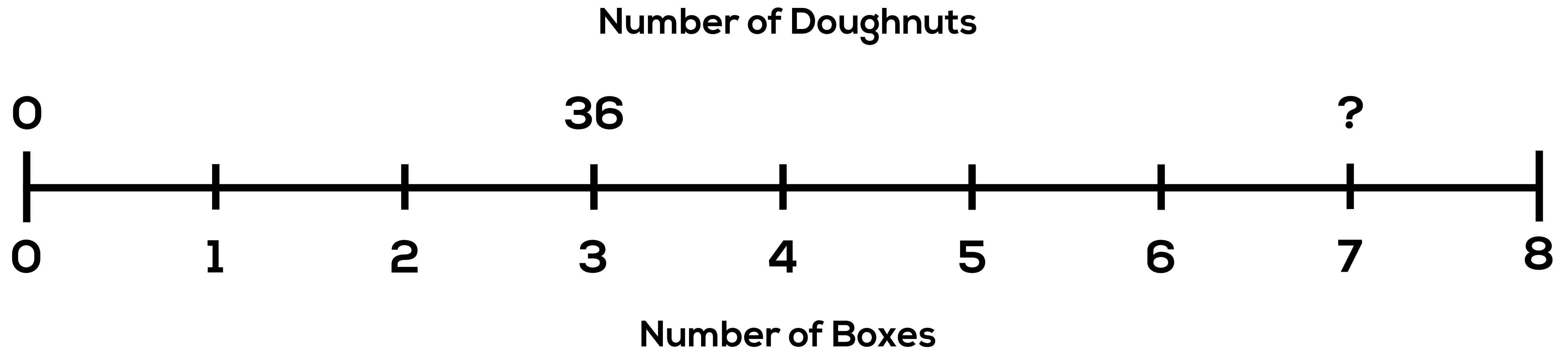
12

7

84

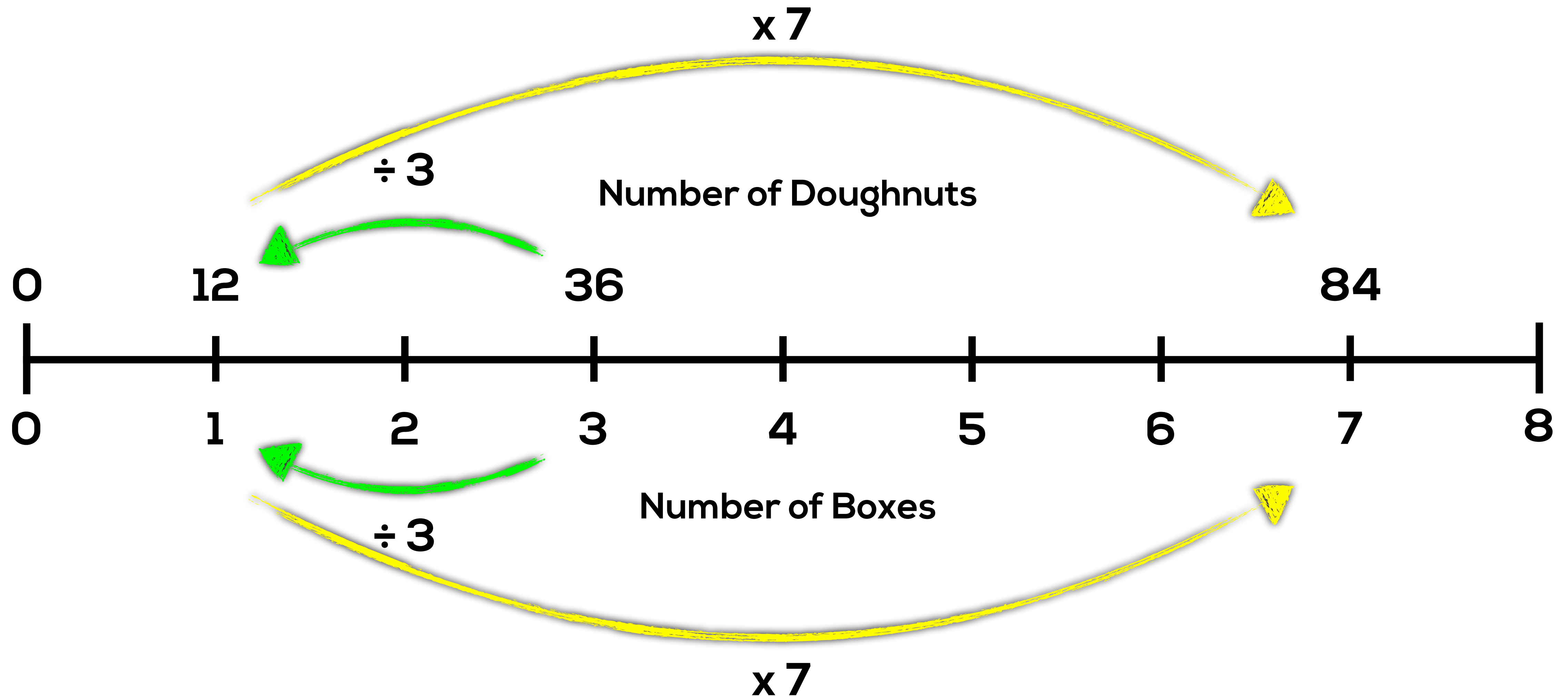


There are 36 doughnuts in 3 boxes.  
How many doughnuts are in 7 boxes?





There are 36 doughnuts in 3 boxes.  
How many doughnuts are in 7 boxes?



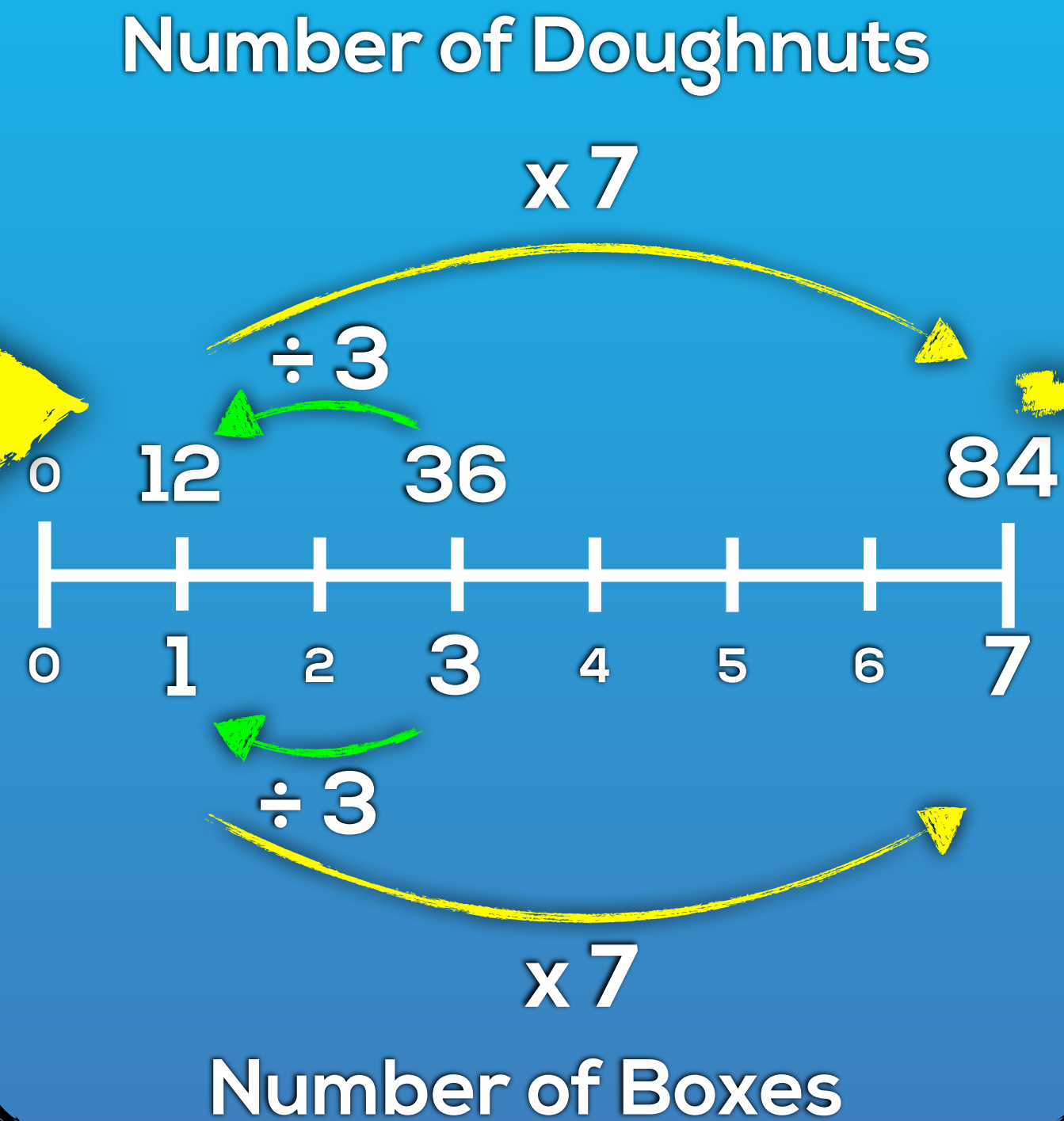
# Concreteness Fading

There are 36 doughnuts in 3 boxes. How many doughnuts are in 7 boxes?

## 1 Concrete



## 2 Visual

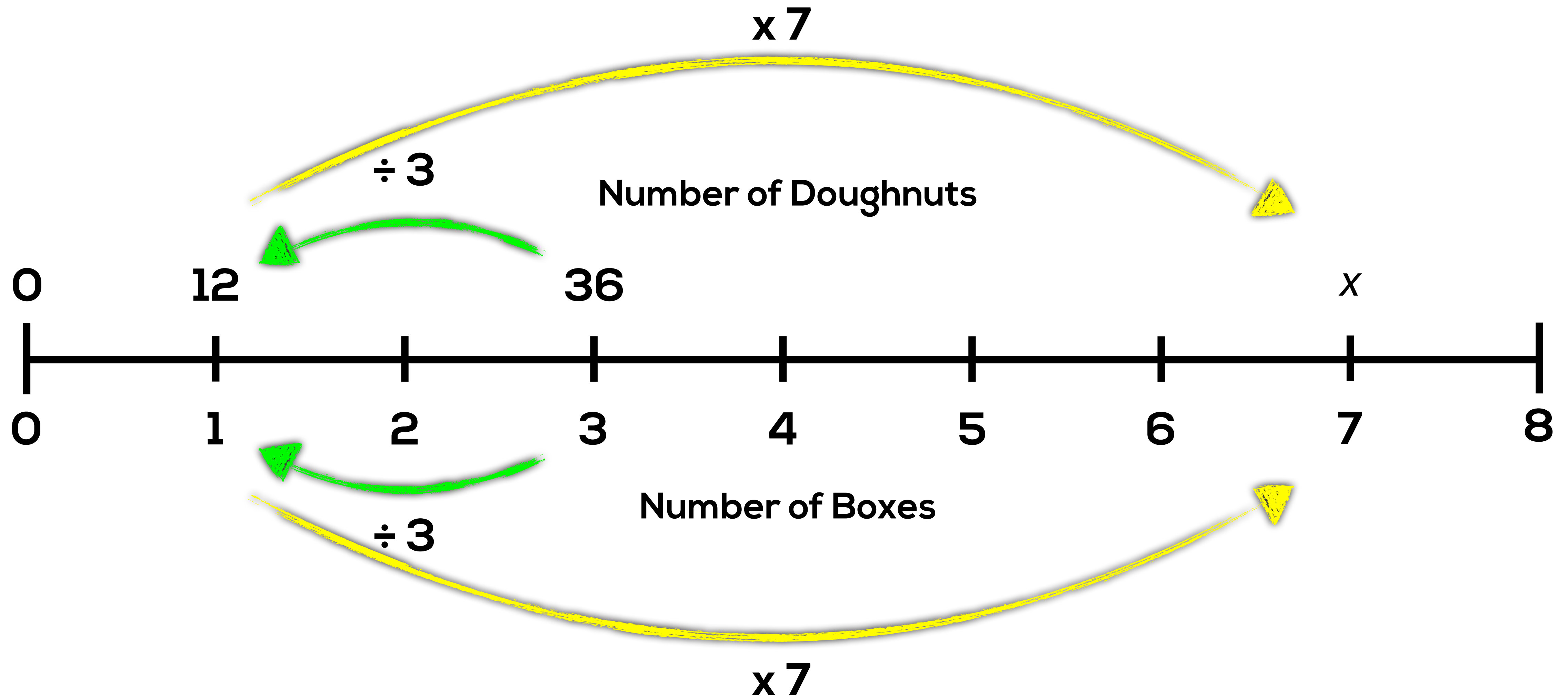


## 3 Abstract

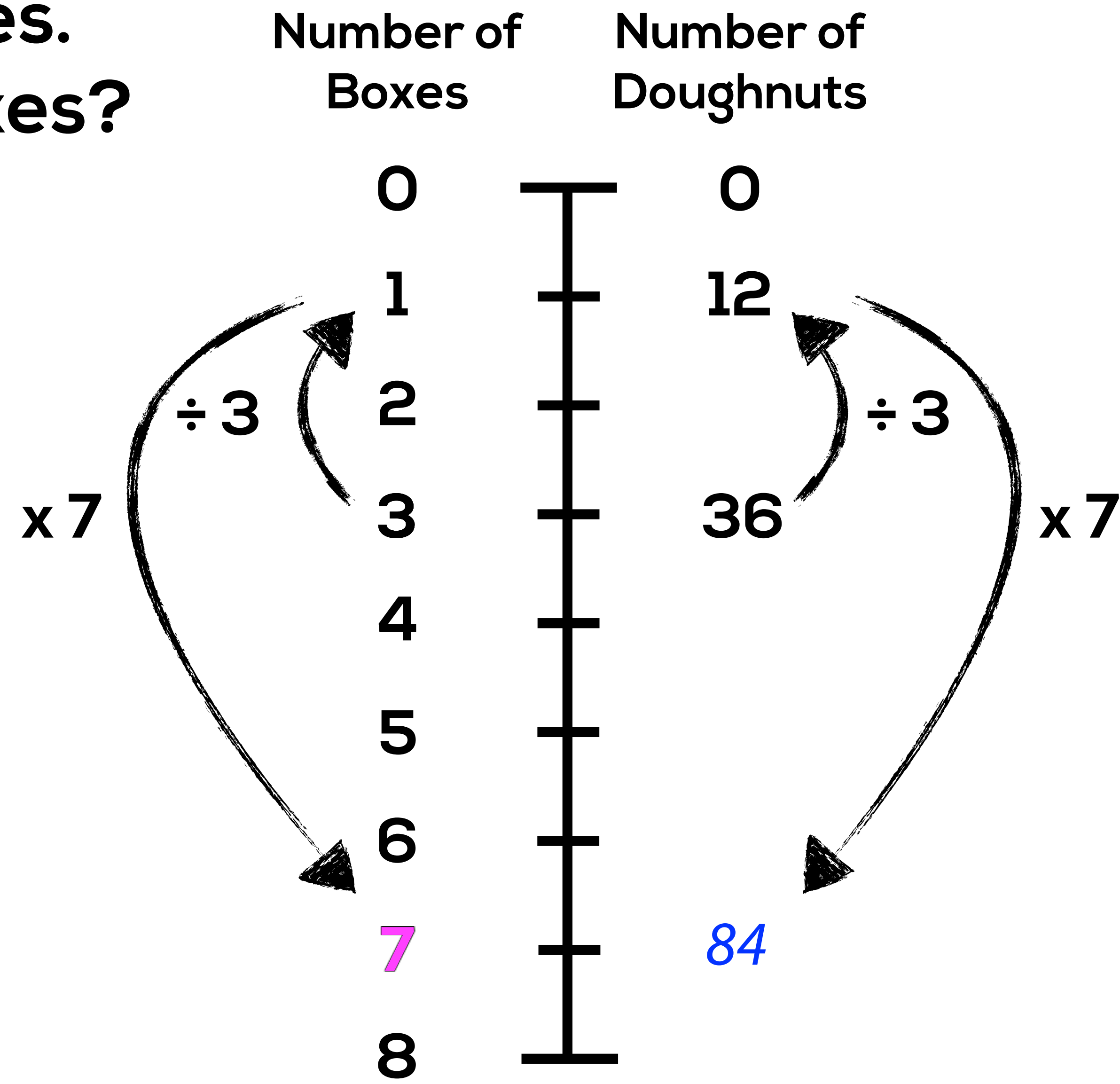
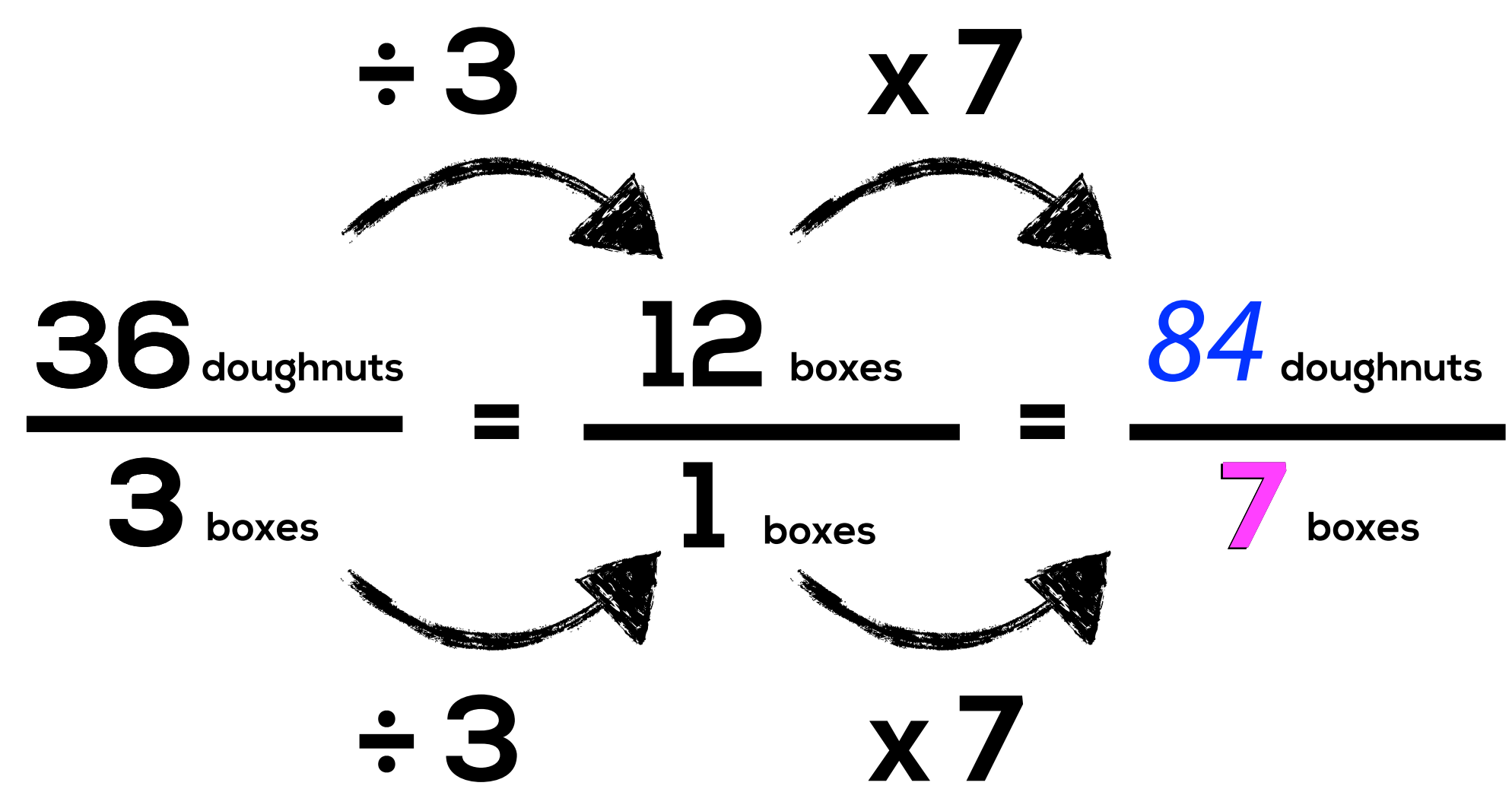
$$\frac{36 \text{ doughnuts}}{3 \text{ boxes}} = \frac{X \text{ doughnuts}}{7 \text{ boxes}}$$
$$\frac{12 \text{ doughnuts}}{1 \text{ boxes}} = \frac{X \text{ doughnuts}}{7 \text{ boxes}}$$
$$7 \text{ boxes} \left( \frac{12 \text{ doughnuts}}{1 \text{ boxes}} \right) = \left( \frac{X \text{ doughnuts}}{7 \text{ boxes}} \right) 7 \text{ boxes}$$
$$84 \text{ doughnuts} = X \text{ doughnuts}$$



There are 36 doughnuts in 3 boxes.  
How many doughnuts are in 7 boxes?



There are 36 doughnuts in 3 boxes.  
How many doughnuts are in 7 boxes?

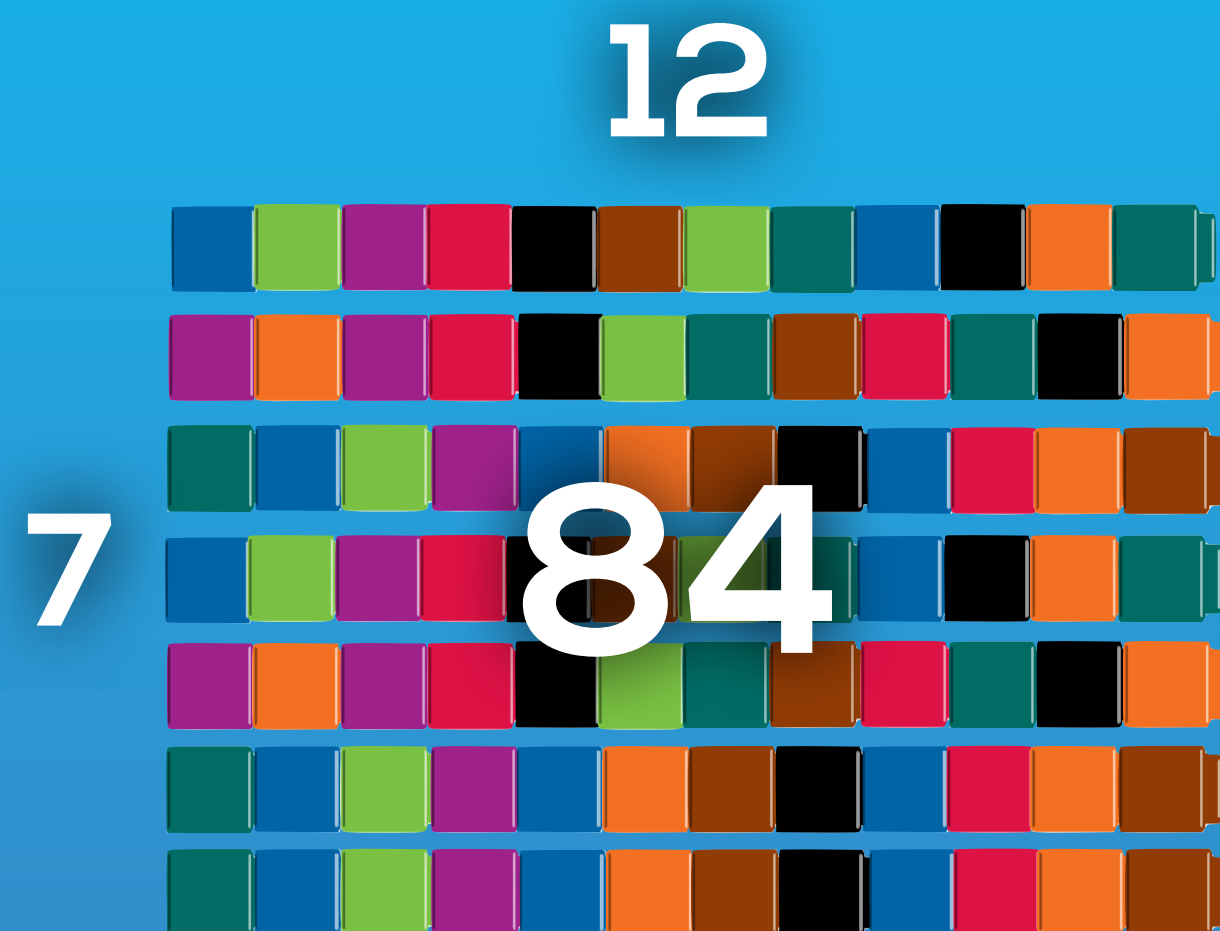




# Concreteness Fading

There are 36 doughnuts in 3 boxes. How many doughnuts are in 7 boxes?

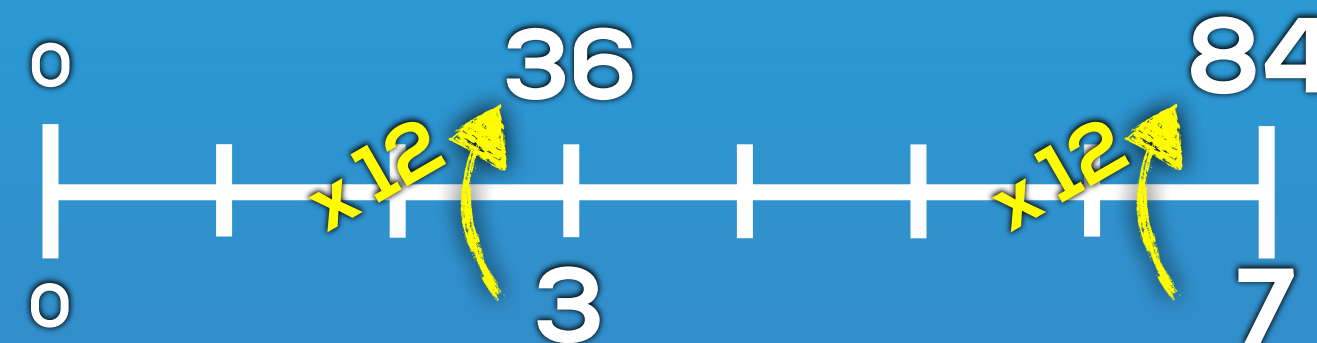
## 1 Concrete



## 2 Visual

$$\frac{36 \text{ doughnuts}}{3 \text{ boxes}} = 12 \text{ doughnuts per box}$$

Number of Doughnuts



Number of Boxes

## 3 Abstract

$$y = kx$$

$$y = 12x$$

$$y = 12(7)$$

$$y = 84$$



32 doughnuts

30

2

32

x 25

25 doughnuts

20

5

600

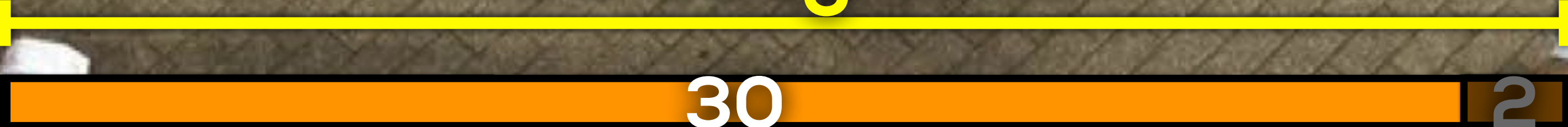
40

150

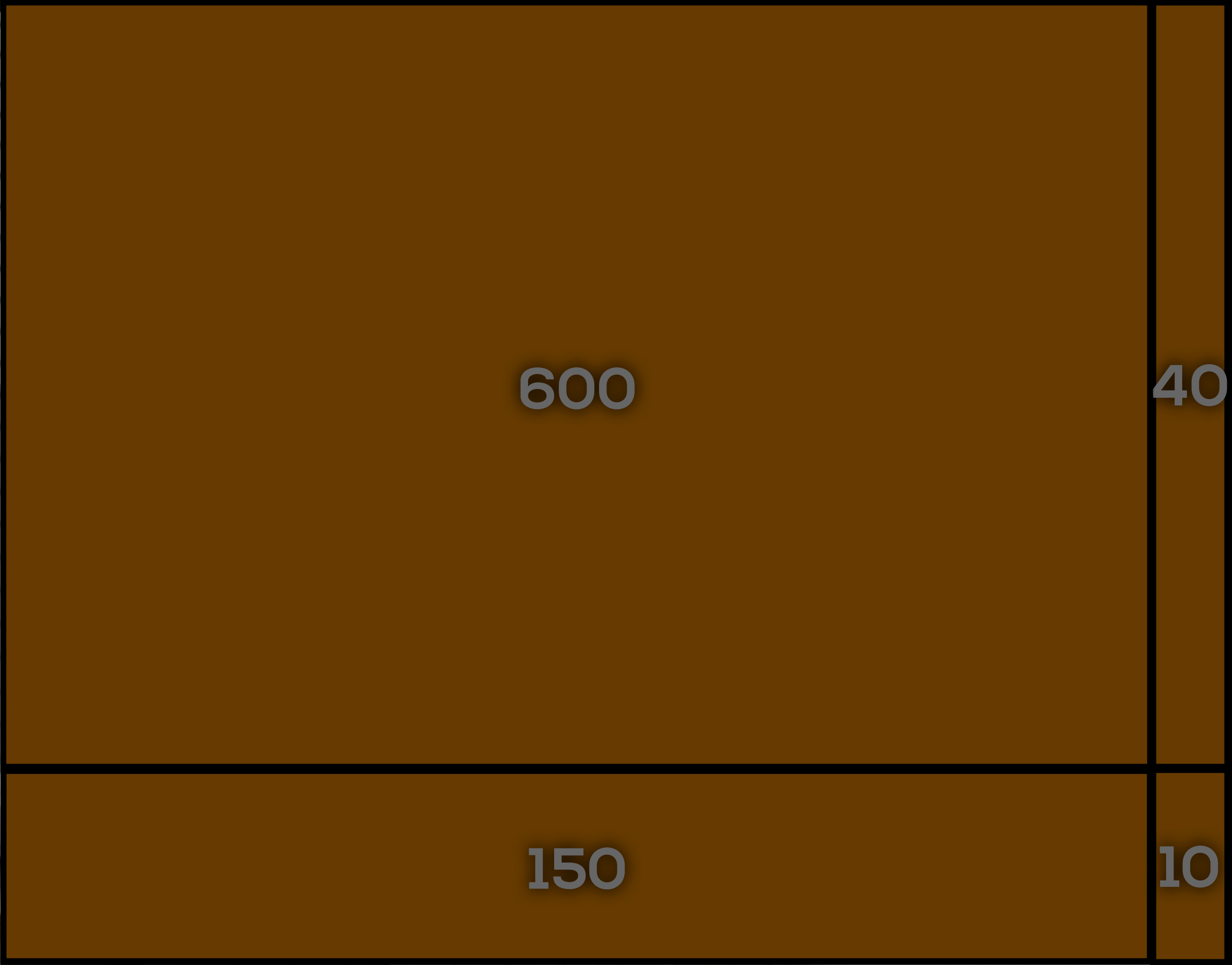
10



32 doughnuts



$$\begin{array}{r} 32 \\ \times 25 \\ \hline \end{array}$$

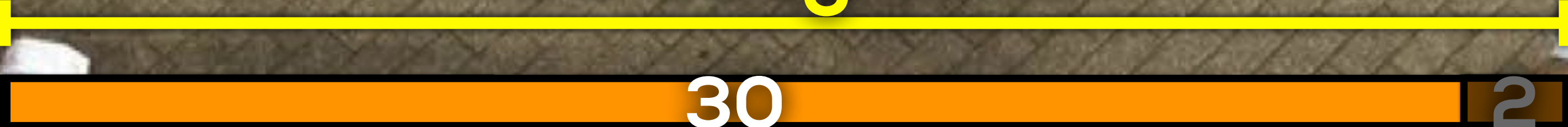


25 doughnuts



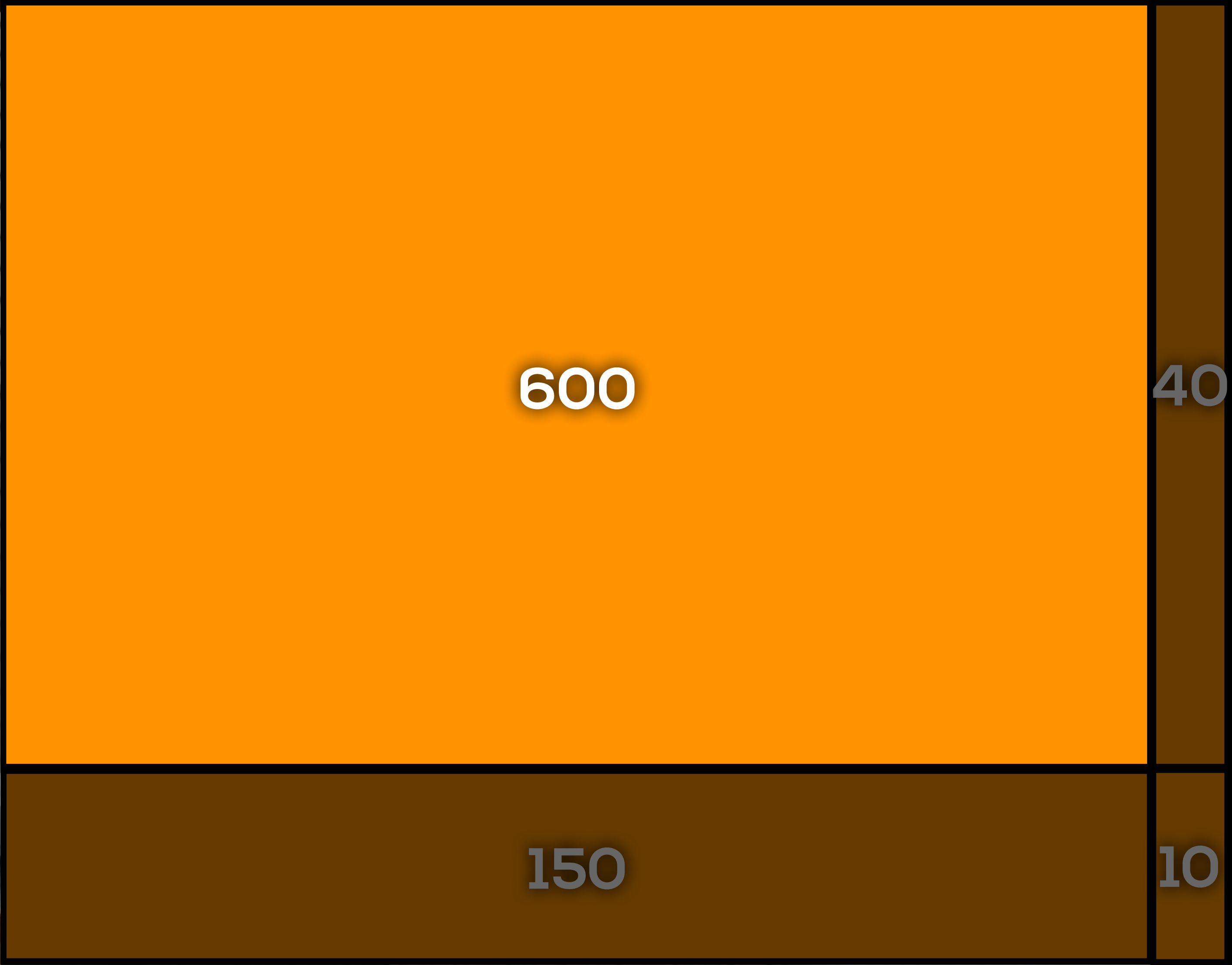


32 doughnuts



$$\begin{array}{r} 32 \\ \times 25 \\ \hline 600 \end{array}$$

25 doughnuts



40

600

10

150



32 doughnuts



$$\begin{array}{r} 32 \\ \times 25 \\ \hline 600 \end{array}$$

25 doughnuts

20

5

600

40

150

10



32 doughnuts



$$\begin{array}{r} 32 \\ \times 25 \\ \hline 600 \\ 40 \end{array}$$

25 doughnuts

20

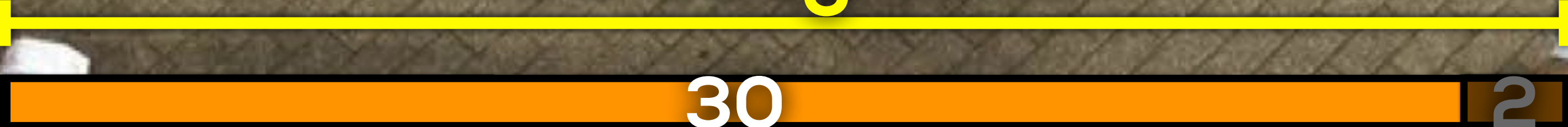
5

40

10



32 doughnuts



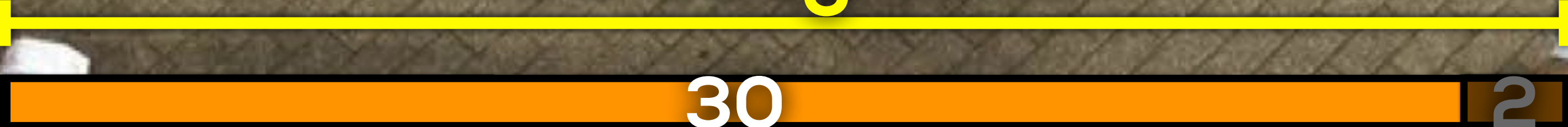
$$\begin{array}{r} 32 \\ \times 25 \\ \hline 600 \\ 40 \end{array}$$

25 doughnuts





32 doughnuts



$$\begin{array}{r} 32 \\ \times 25 \\ \hline \end{array}$$

600  
40  
150

25 doughnuts





32 doughnuts



$$\begin{array}{r} 32 \\ \times 25 \\ \hline 600 \\ 40 \\ 150 \end{array}$$

25 doughnuts

20

5

30

2

600

40

150

10



25 doughnuts

20

5

32 doughnuts

30

2

600

40

150

10

32  
x 25

600

40

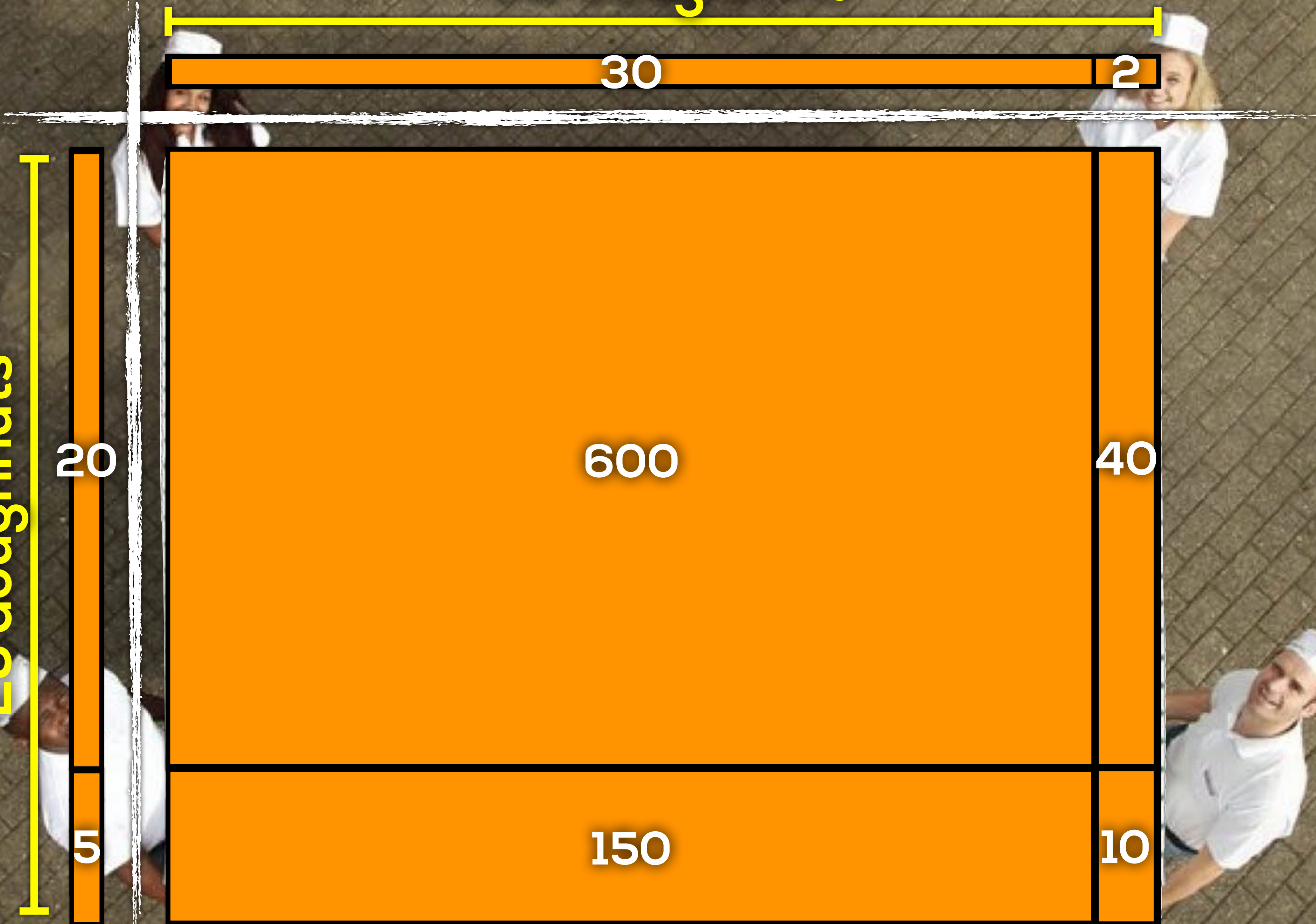
150

10



25 doughnuts

32 doughnuts



$$\begin{array}{r} 32 \\ \times 25 \\ \hline 600 \\ 40 \\ 150 \\ 10 \\ \hline \end{array}$$



32 doughnuts

25 doughnuts

800

32  
x 25

---

600

40

150

10

---

800



# Update Your Prediction

32 doughnuts

25 doughnuts

800

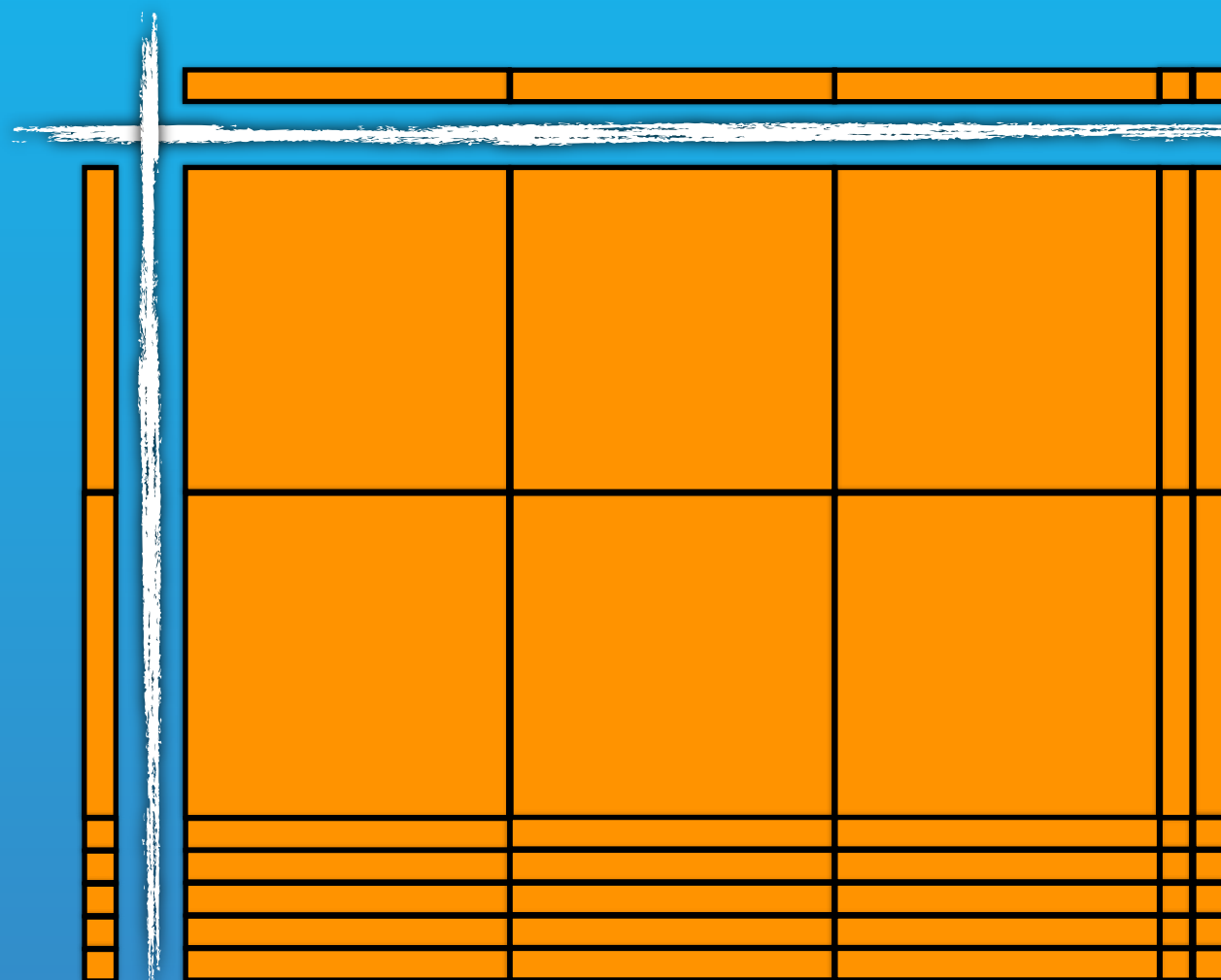




# Concreteness Fading

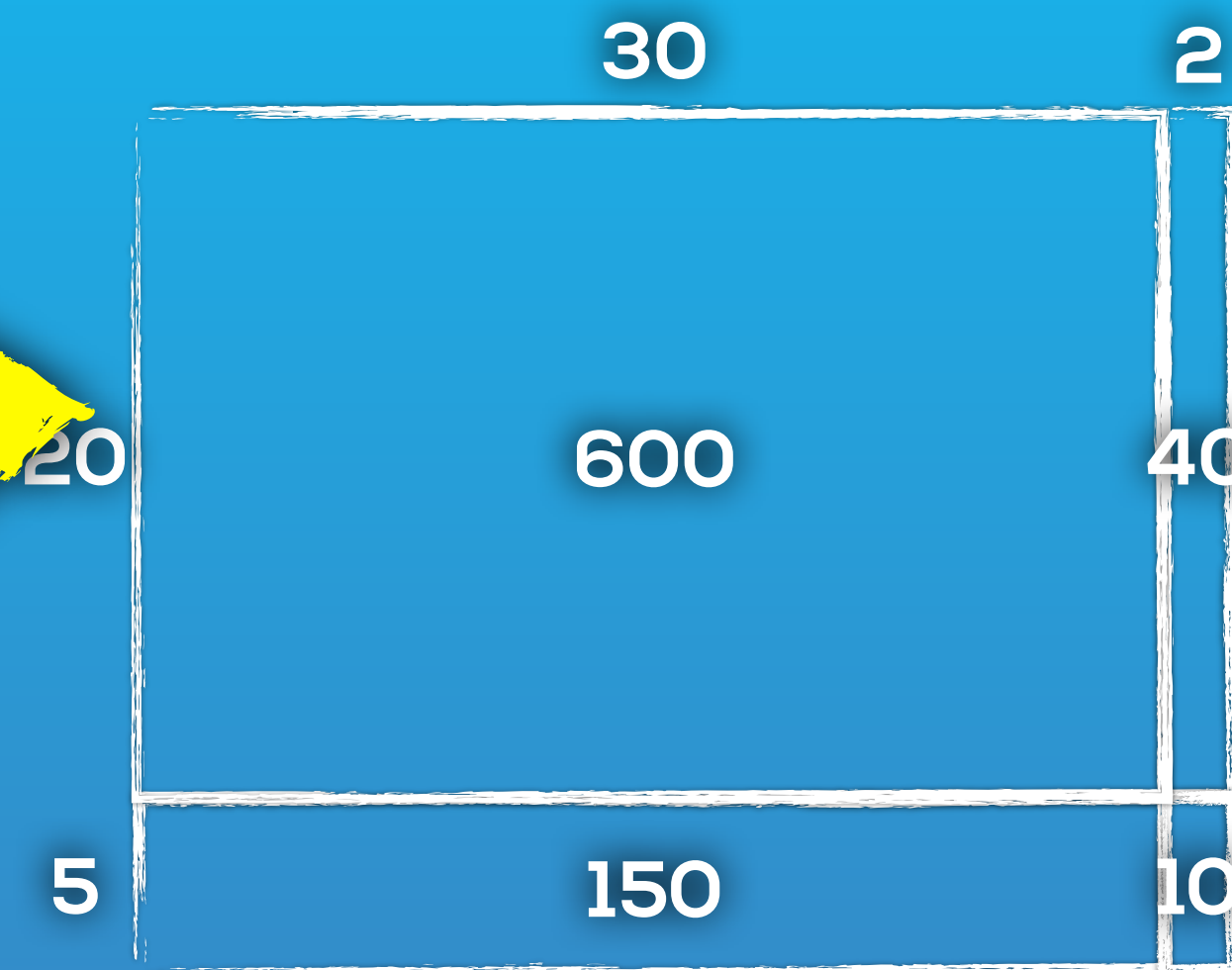
How many doughnuts are in the giant box?

**1** Enactive



Concrete

**2** Iconic



Visual

**3** Symbolic

$$\begin{array}{r} 32 \\ \times 25 \\ \hline 600 \quad (30 \times 20) \\ 40 \quad (2 \times 20) \\ 150 \quad (30 \times 5) \\ 10 \quad (2 \times 5) \\ \hline 800 \end{array}$$

Abstract



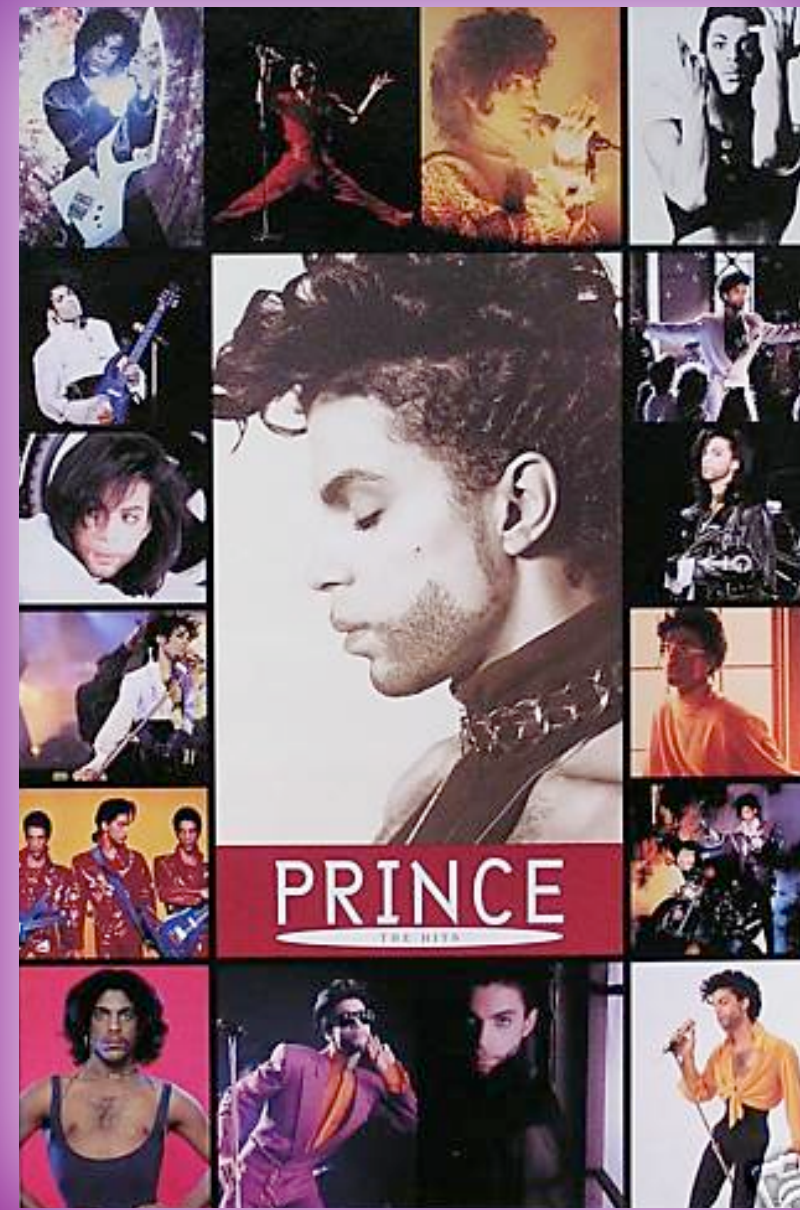
# STRATEGY #3 BE MORE PRINCE

**1** Enactive



Concrete

**2** Iconic



Visual

**3** Symbolic



Abstract



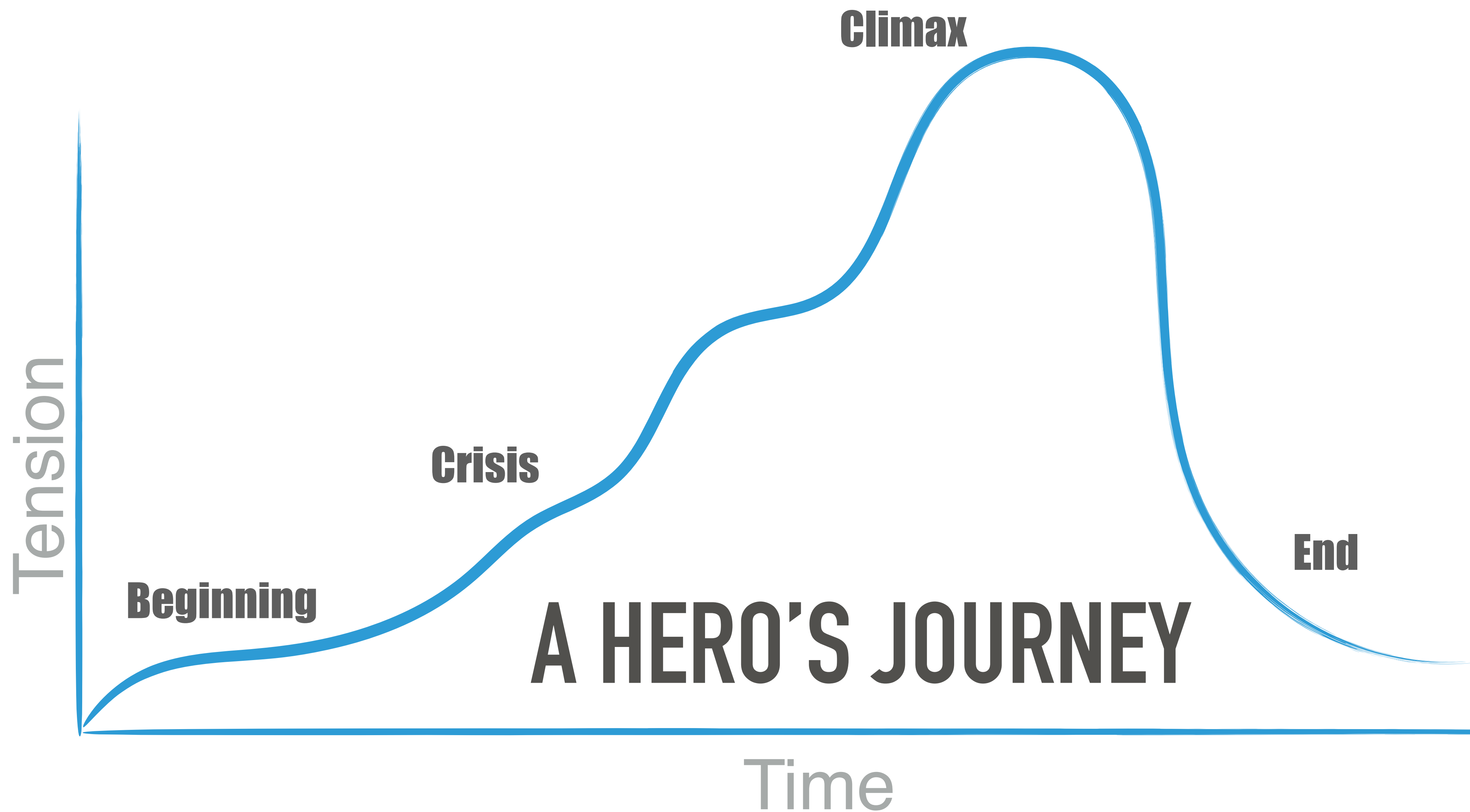
# STRATEGY #4

BE THE  
**GUIDE**

---

NOT THE  
**HERO**

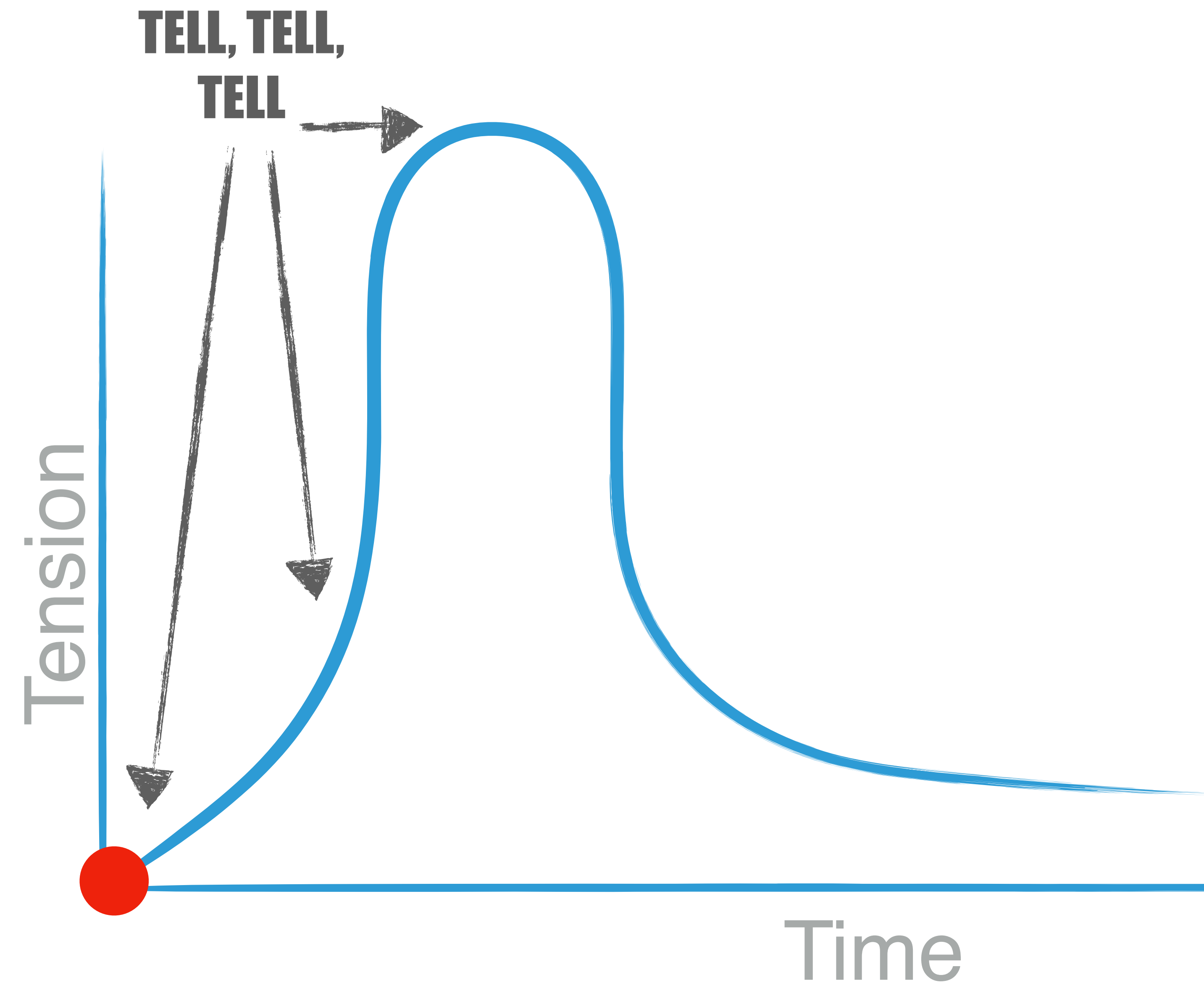










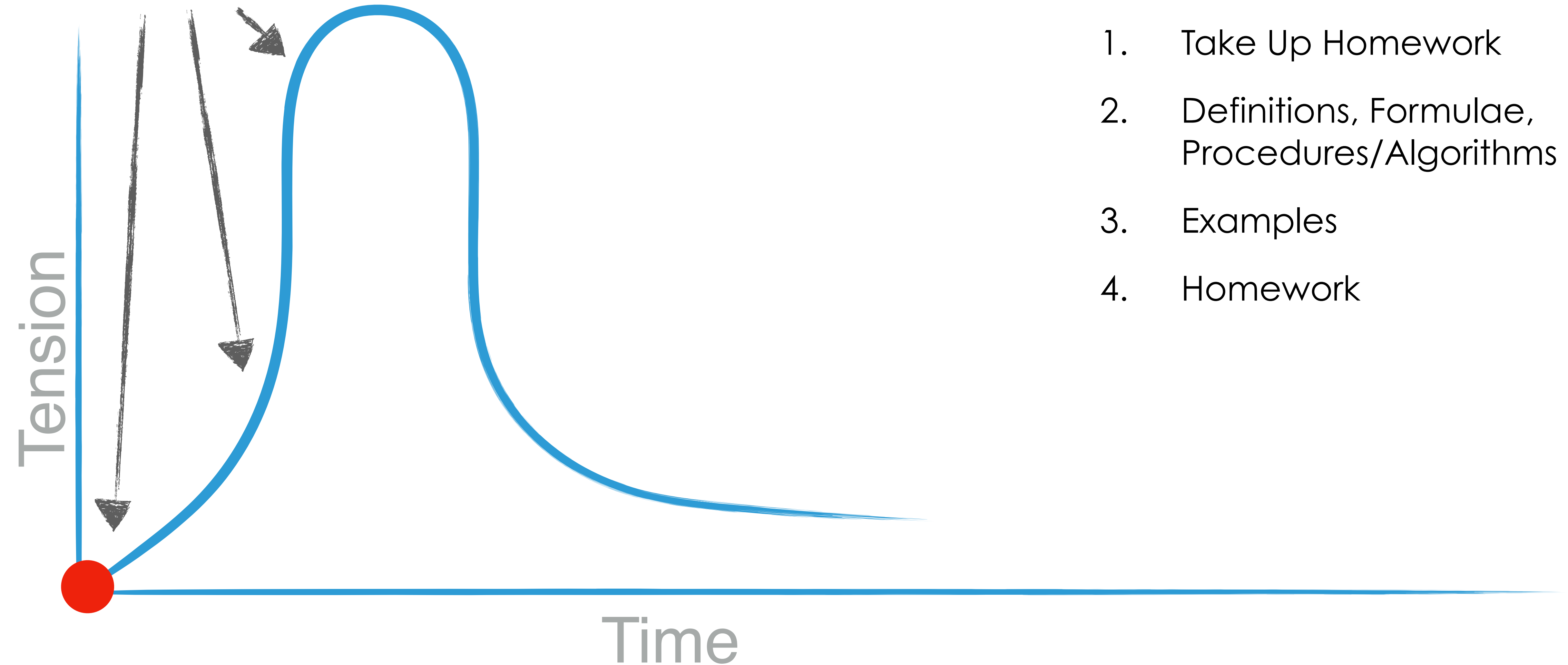


# MATH CLASS

1. Take Up Homework
2. Definitions, Formulae, Procedures/Algorithms
3. Examples
4. Homework



## RUSHING TO THE ALGORITHM



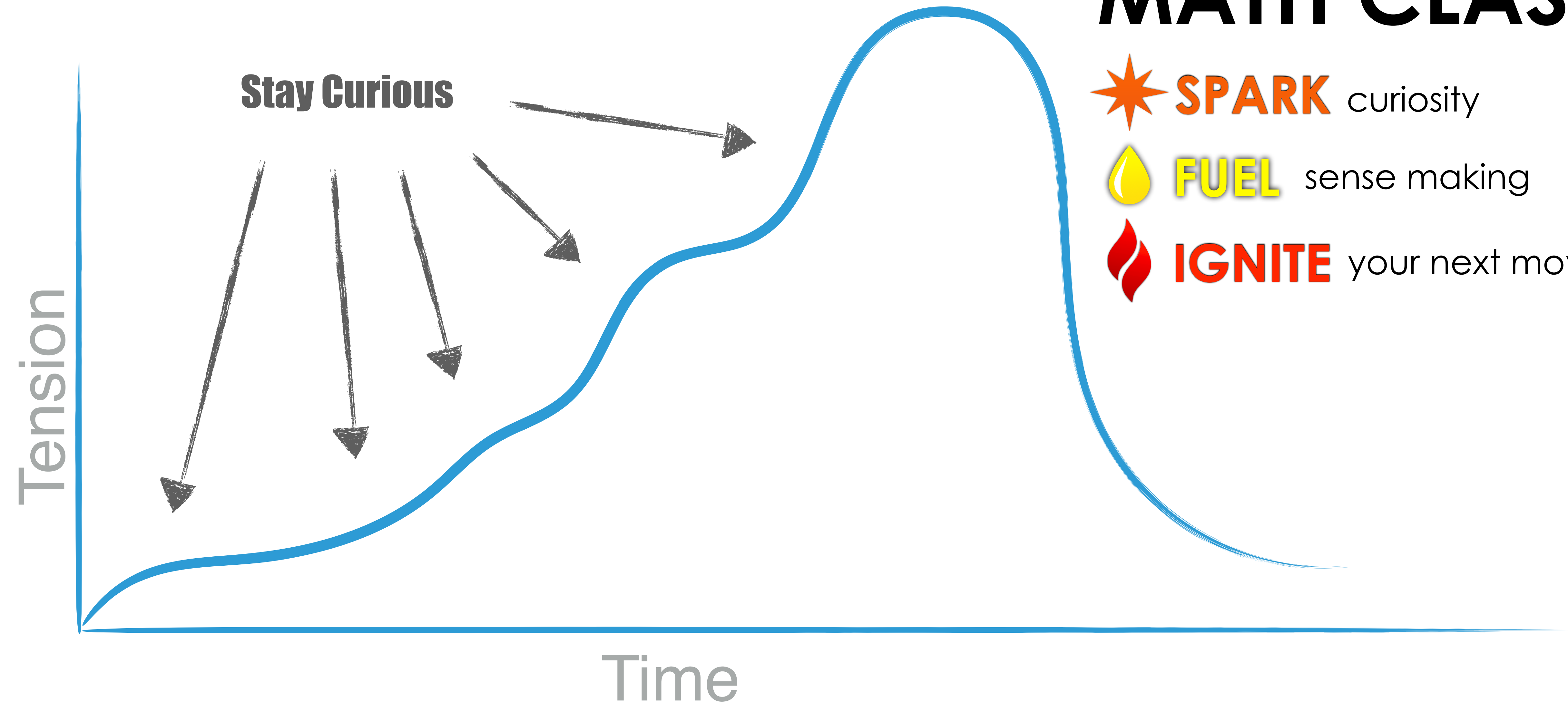
## MATH CLASS

1. Take Up Homework
2. Definitions, Formulae, Procedures/Algorithms
3. Examples
4. Homework

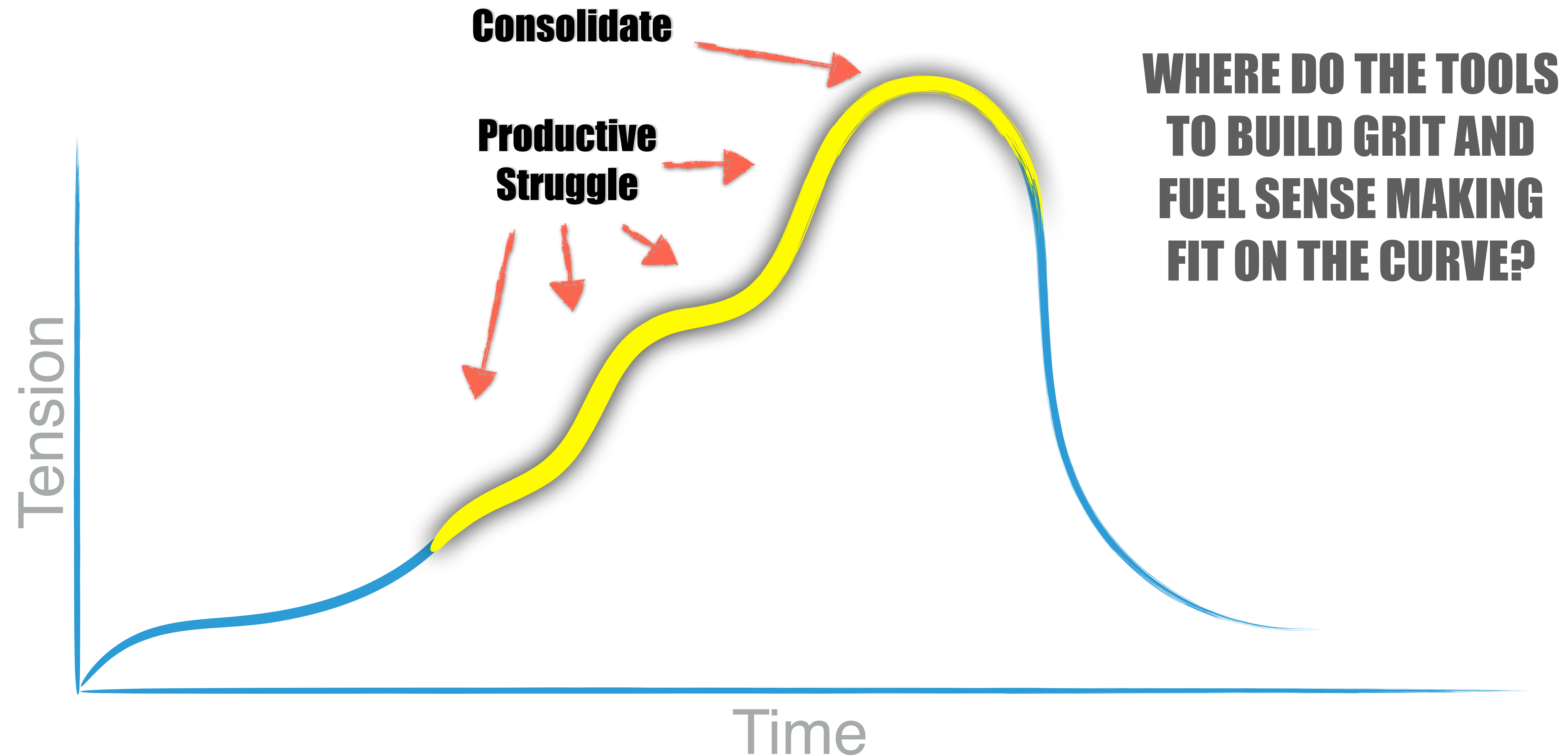


# MATH CLASS

- ★ **SPARK** curiosity
- 💧 **FUEL** sense making
- 🔥 **IGNITE** your next move

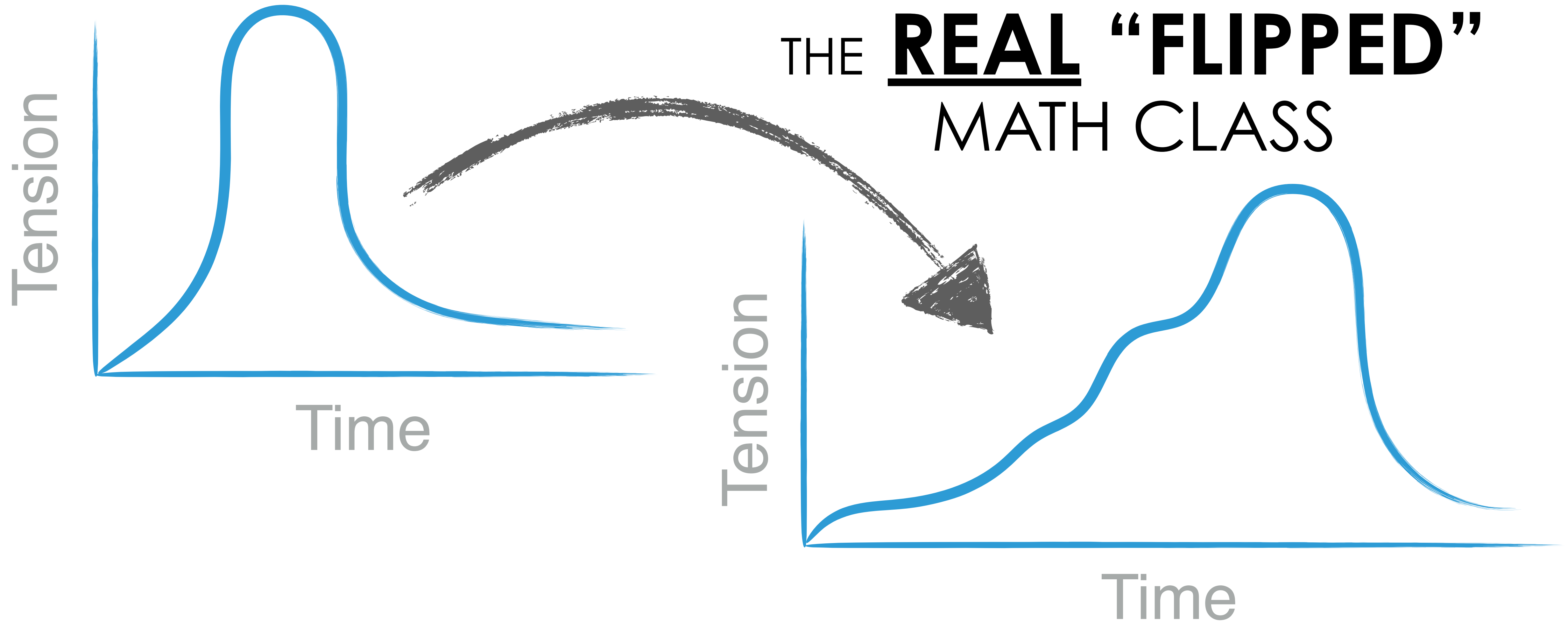








# 4 STRATEGIES TO HELP STUDENTS START MATH PROBLEMS & STICK WITH THEM





# WHAT YOU'LL GET

How to structure lessons so that students will dive into the problem solving process without relying on the teacher every step of the way;



# WHAT YOU'LL GET

How to help your students build confidence and resilience so they develop a productive disposition towards mathematics;



# WHAT YOU'LL GET

How to ensure students are building a conceptual understanding in order to build procedural fluency over time; and,

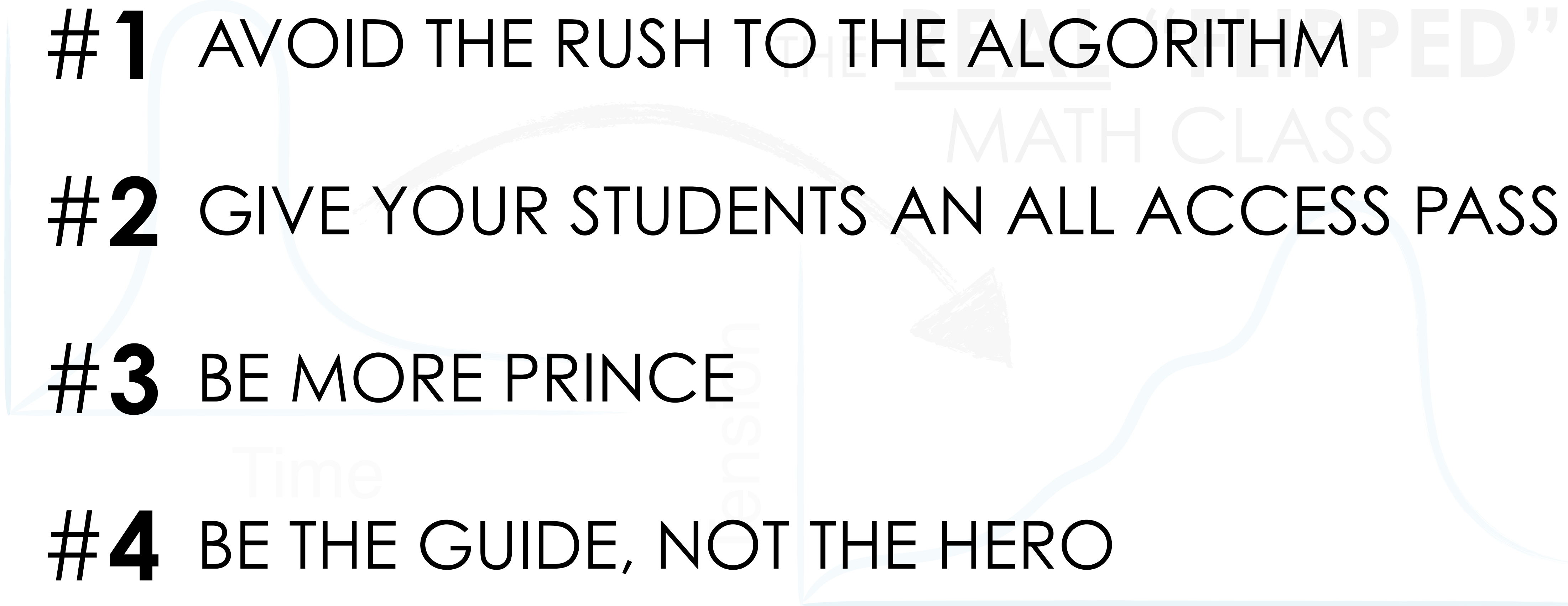


# WHAT YOU'LL GET

Teacher moves that promote student thinking through productive struggle.



# SHARE YOUR **BIGGEST** TAKE AWAY IN THE CHAT

- 
- #1 AVOID THE RUSH TO THE ALGORITHM
  - #2 GIVE YOUR STUDENTS AN ALL ACCESS PASS
  - #3 BE MORE PRINCE
  - #4 BE THE GUIDE, NOT THE HERO

LEARN MORE: [MAKEMATHMOMENTS.COM/USNC](https://makemathmoments.com/usnc)



[DASHBOARD](#)[COURSES & WORKSHOP](#) ▾[TASKS](#)[COMMUNITY](#)[Kyle Pearce](#) ▾

1051



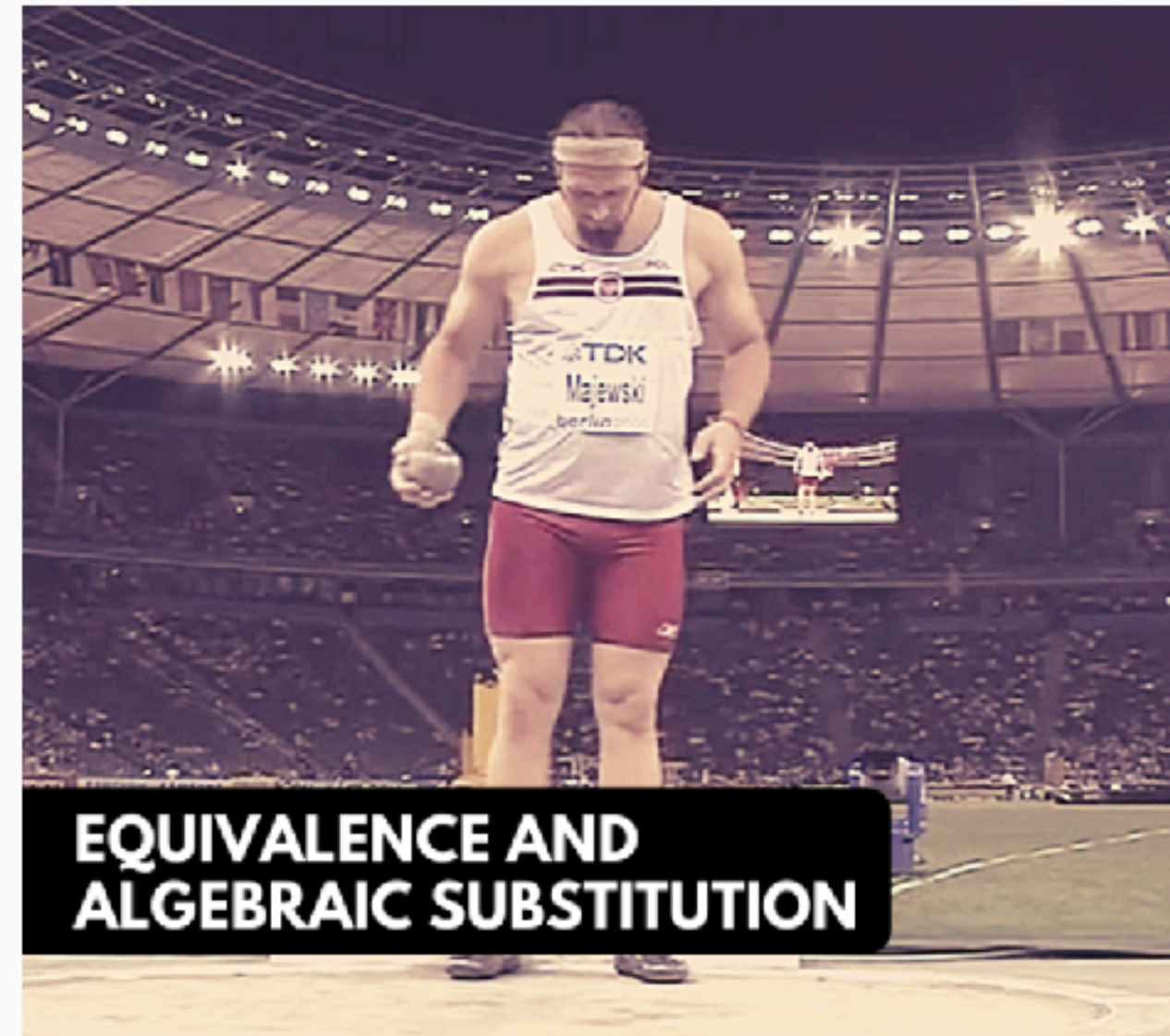
## Tasks

[All](#)[Addition](#)[Algebra](#)[Circles](#)[Circumference](#)[Counting](#)[Data Management](#)[Division](#)[Estimation](#)[Fractions](#)[Geometry](#)[Linear Relations](#)[Mean](#)[Measurement](#)[Multiplication](#)[Percentages](#)[Probability](#)[Proportional Reasoning](#)[Ratios and Rates](#)[Solving Equations](#)[Subtraction](#)[Volume](#)

### Scavenger Hunt

Make Math Moments Unit

Explore the graphical representation of categorical data and the use of mean as a measure of central tendency.



### Shot Put

Make Math Moments Unit

Students will explore solving equations using the idea of equivalence and substitution.



### Donut Delight

Make Math Moments Unit

Use arrays to develop an understanding of the relationship between multiplication and division.



### Hot Chocolate

Make Math Moments Unit

Explore proportional relationships through skip counting, repeated addition, multiplication, and more.





DASHBOARD



COURSES & WORKSHOP



TASKS



COMMUNITY

Kyle Pearce



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## Tasks

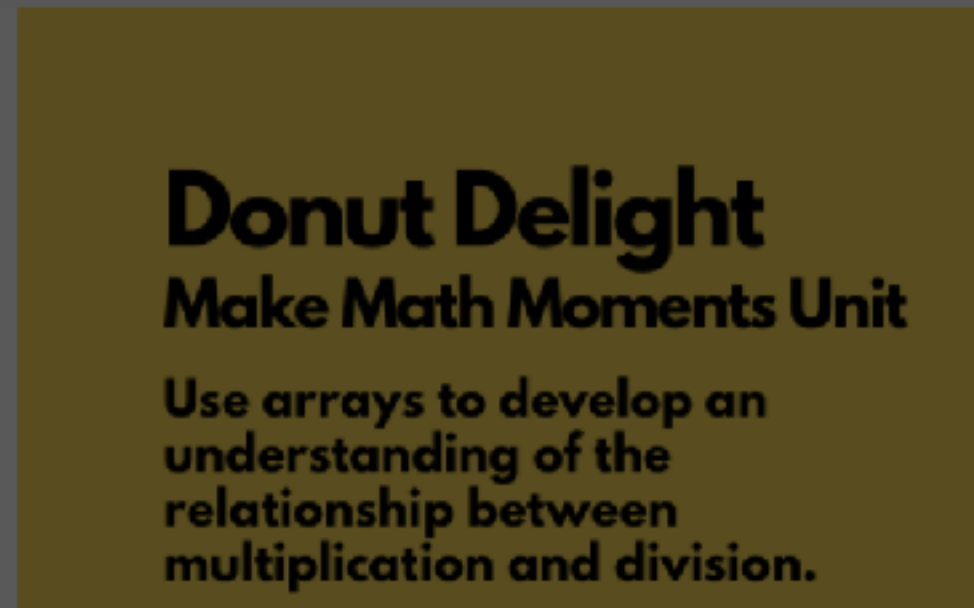
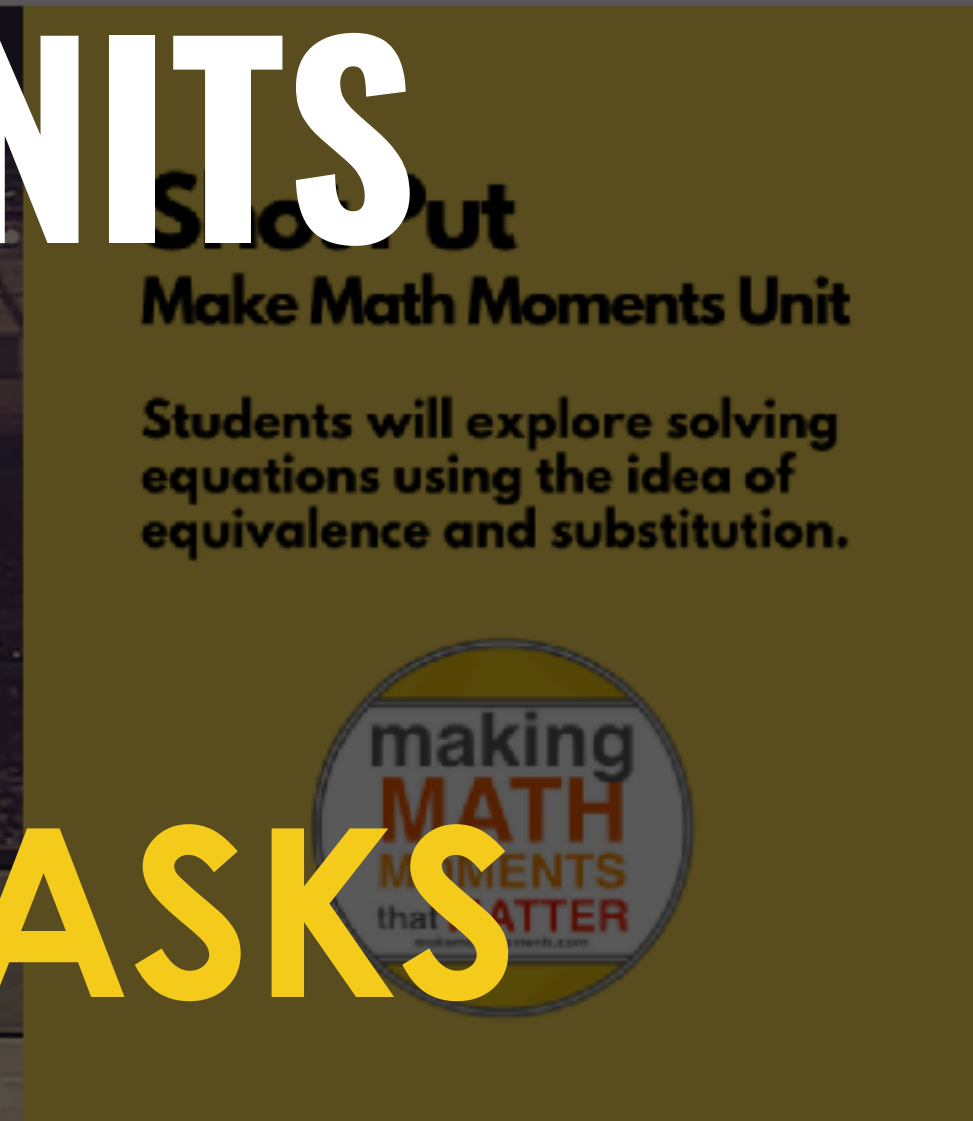
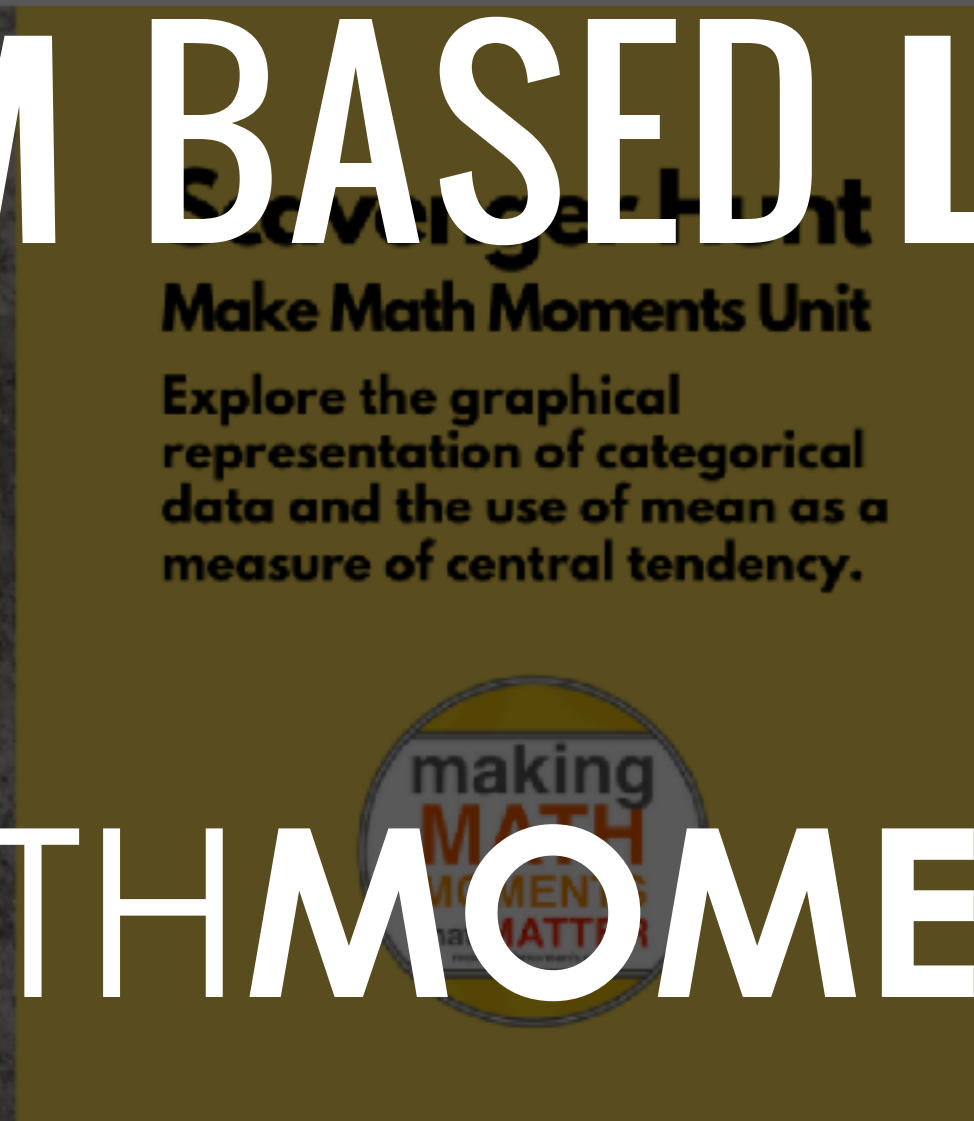
All Addition Algebra Circles Circumference Counting Data Management Division Estimation Fractions Geometry Linear Relations

Mean Measurement Multiplication Percentages Probability Proportional Reasoning Ratios and Rates Solving Equations Subtraction

# CHECK OUT OUR

# PROBLEM BASED LESSONS & UNITS

# MAKEMATHMOMENTS.COM/TASKS





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