CHAPTER 1

LOGIC
PROBLEM SOLVING

QUIZ

Can you apply a **deductive thinking** ?

- ✔ Only fish oil contains Omega 3
- ✔ Only foods that contain Omega 3 help with brain development.

Which conclusion can be derived from these 2 statements?

A - All fish oils help with brain development

.

B - Only what contains Omega 3 is fish oil.

C - All that helps with brain development is fish oil

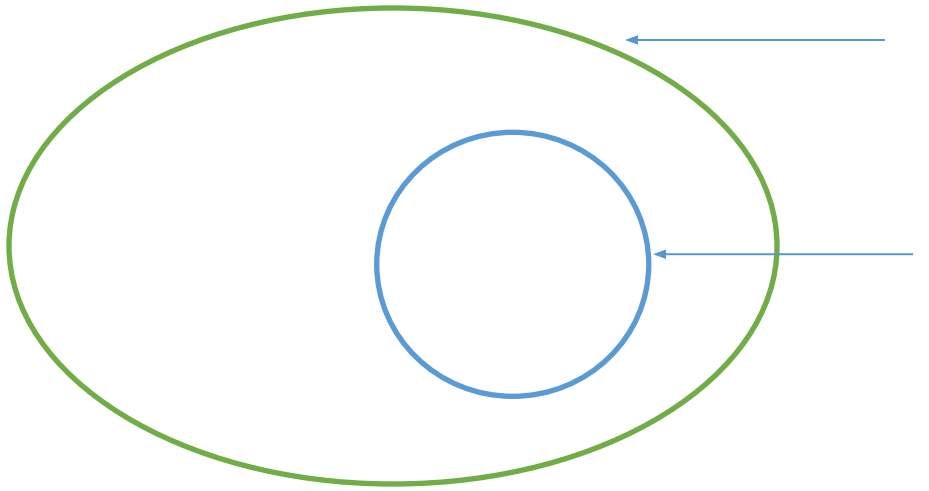
.

D - There are fish oils that help with brain development.

QUIZ

Can you apply a **deductive thinking** ?

- ✔ Only fish oil contains Omega 3
- ✔ Only foods that contain Omega 3 help with brain development.



- All fish oils help with brain development

Not all fish oil contains Omega3 !!

EXPLAIN

Think Before You Start Doing

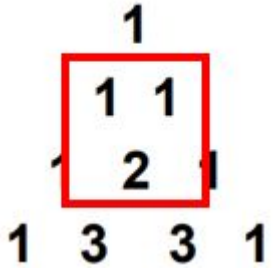
1 - **UNDERSTAND**

Read the problem carefully

Draw diagrams

2 - CREATE A **STRATEGY**

Question everything



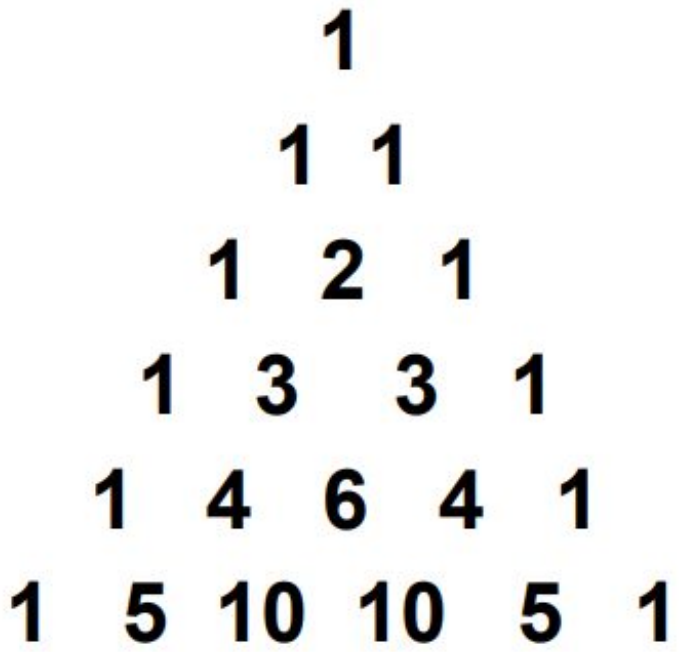
interpret repetitive patterns.

Lok for details

Learn from mistakes

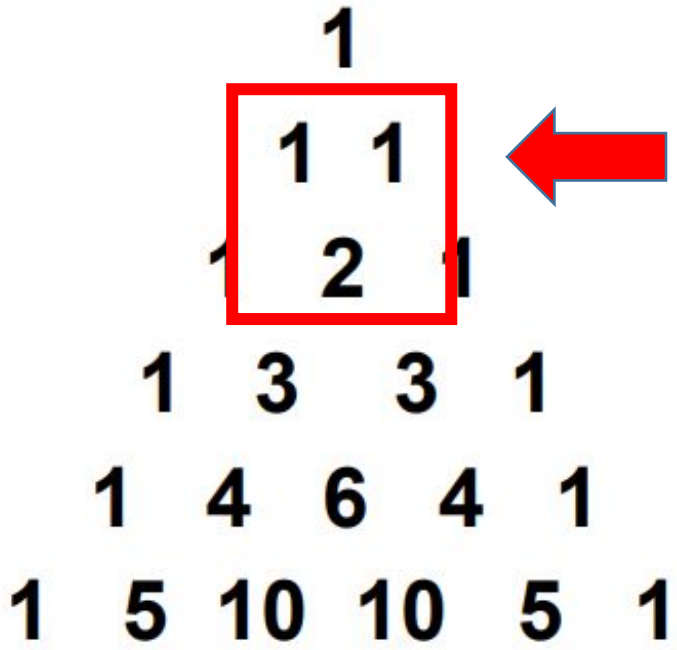
EXPLAIN

Example : “Find the next line in the sequence”



EXPLAIN

Step 1 : **we find the pattern**



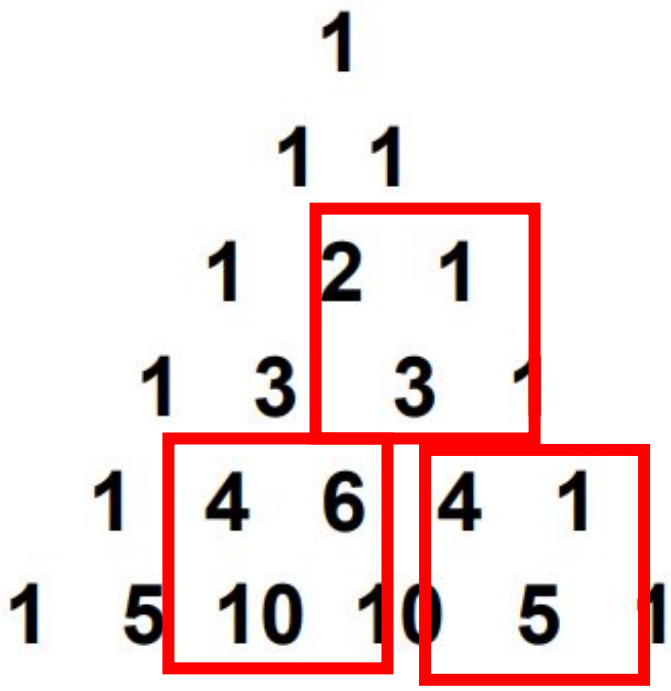
EXPLAIN

Step 2 : we draw some diagram to understand

It look like the two dots are the sum of two ones.

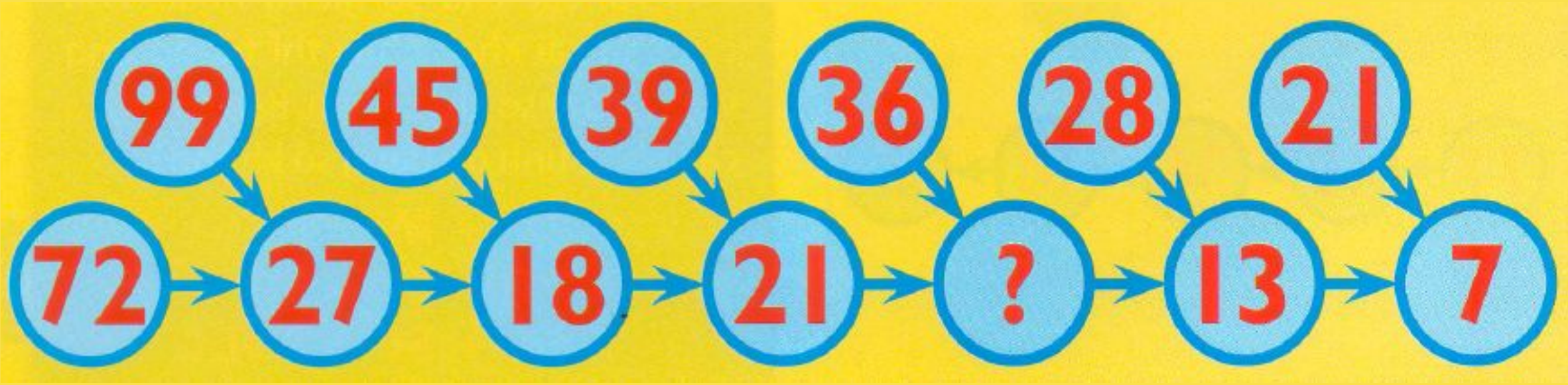
EXPLAIN

Step 3 : we check our idea work everywhere



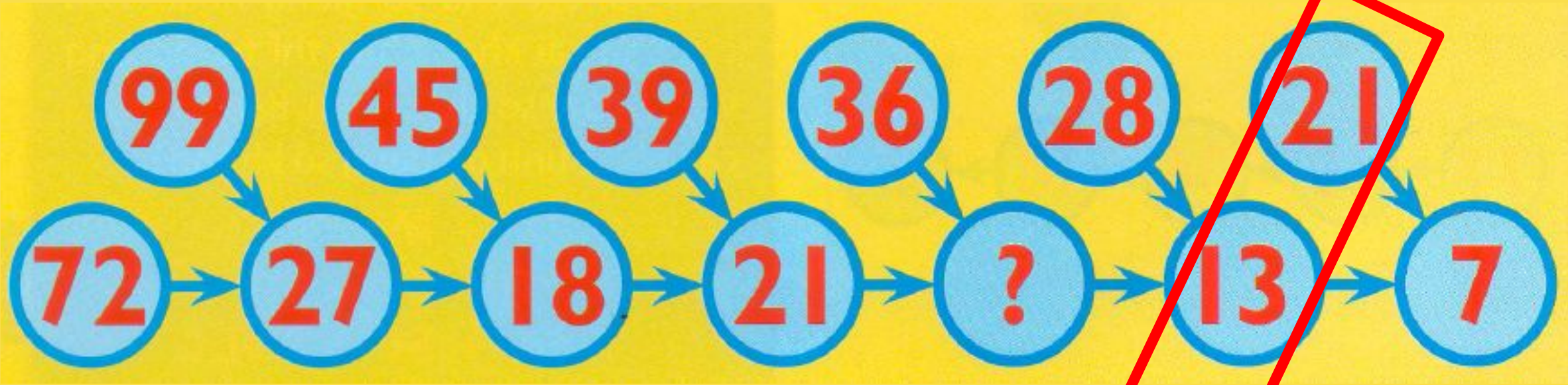
YES !

Apply this process to find the
missing number



We found a pattern…. Then we check if it works everywhere

2 + 1 + 1 + 3 = 7



PRACTICE

15 MIN

ACTIVITY

Triangles

EXPLORE

15 MIN

ACTIVITY

Tower of Hanoi

https://www.mathsisfun.com/games/towerofhanoi.html

PRACTICE

15 MIN

ACTIVITY

Zebra puzzle

- Start by reading all the clues
- Find all the "basic" clues and mark them.

  Example: The German lives in house three.

- Deduce some information using two or more clues;

https://www.brainzilla.com/logic/zebra/einsteins-riddle/

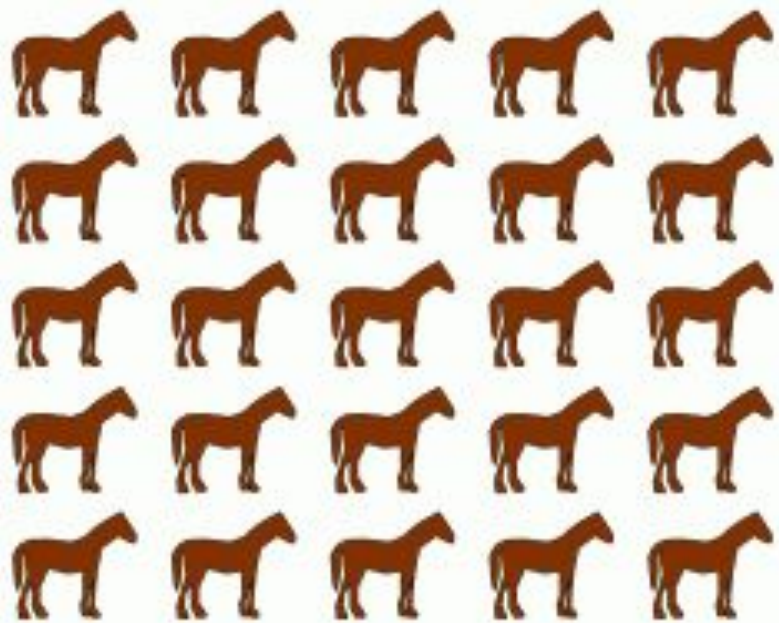
PRACTICE

THE GARDEN

ZEBRA PUZZLES

PRACTICE

Can You Solve The 25 Horses Puzzle?
Google Interview Question



There are 25 horses. What is the minimum number of races needed so you can identify the fastest 3 horses? You can race up to 5 horses at a time, but you do not have a watch.

Mind Your Decisions

PRACTICE

Find out everyone's **full name**

Four children (Ann, Sam, Henry, Kendra) have different last names (Smith, Jones, Gonzales, Lee).

Use the following clue to help you figure this out:

a. Ann's last name does not have a "z" in it.
b. Sam's last name does not end with an "s".
c. Henry's last name has 5 letters in it.
d. Sam's last name is not the shortest one here.