Project Management and Soft Skills
DIDA Diagrams

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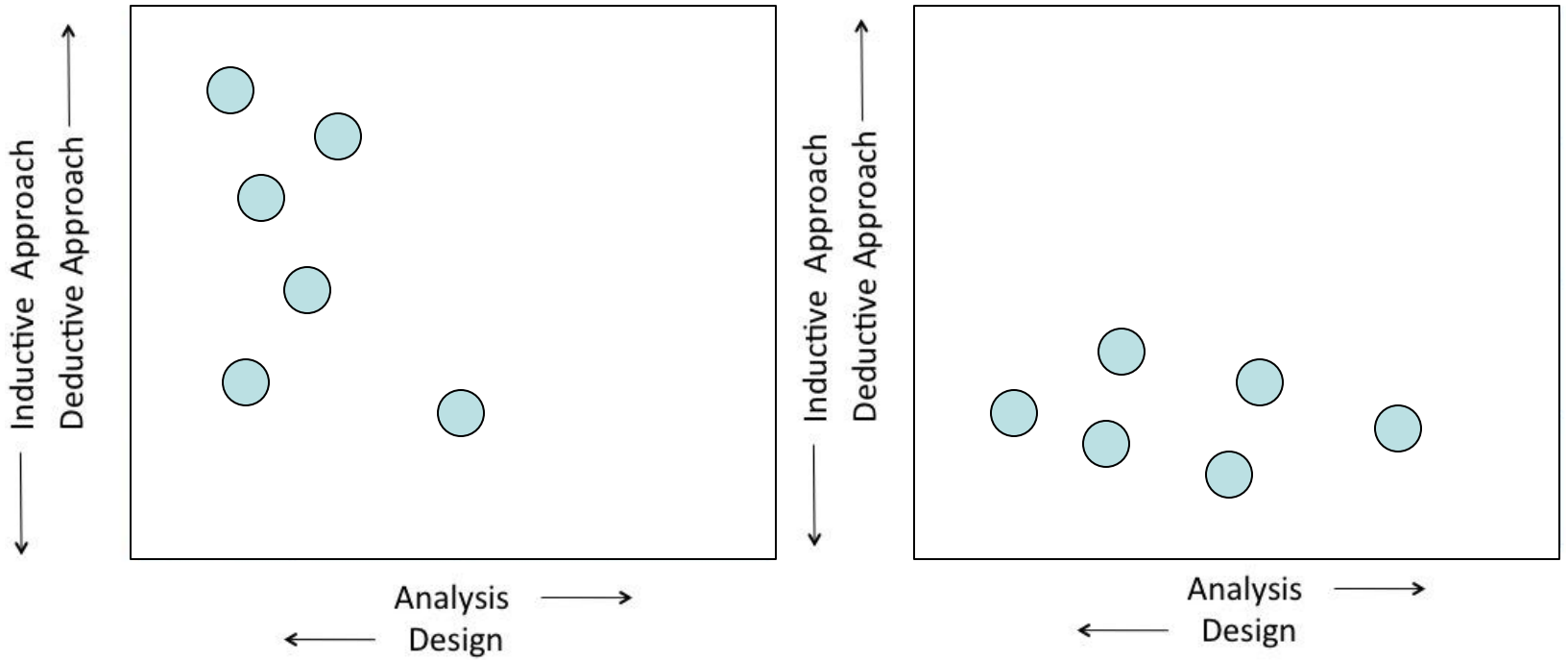
Office Hours:
Monday 4 – 6 pm

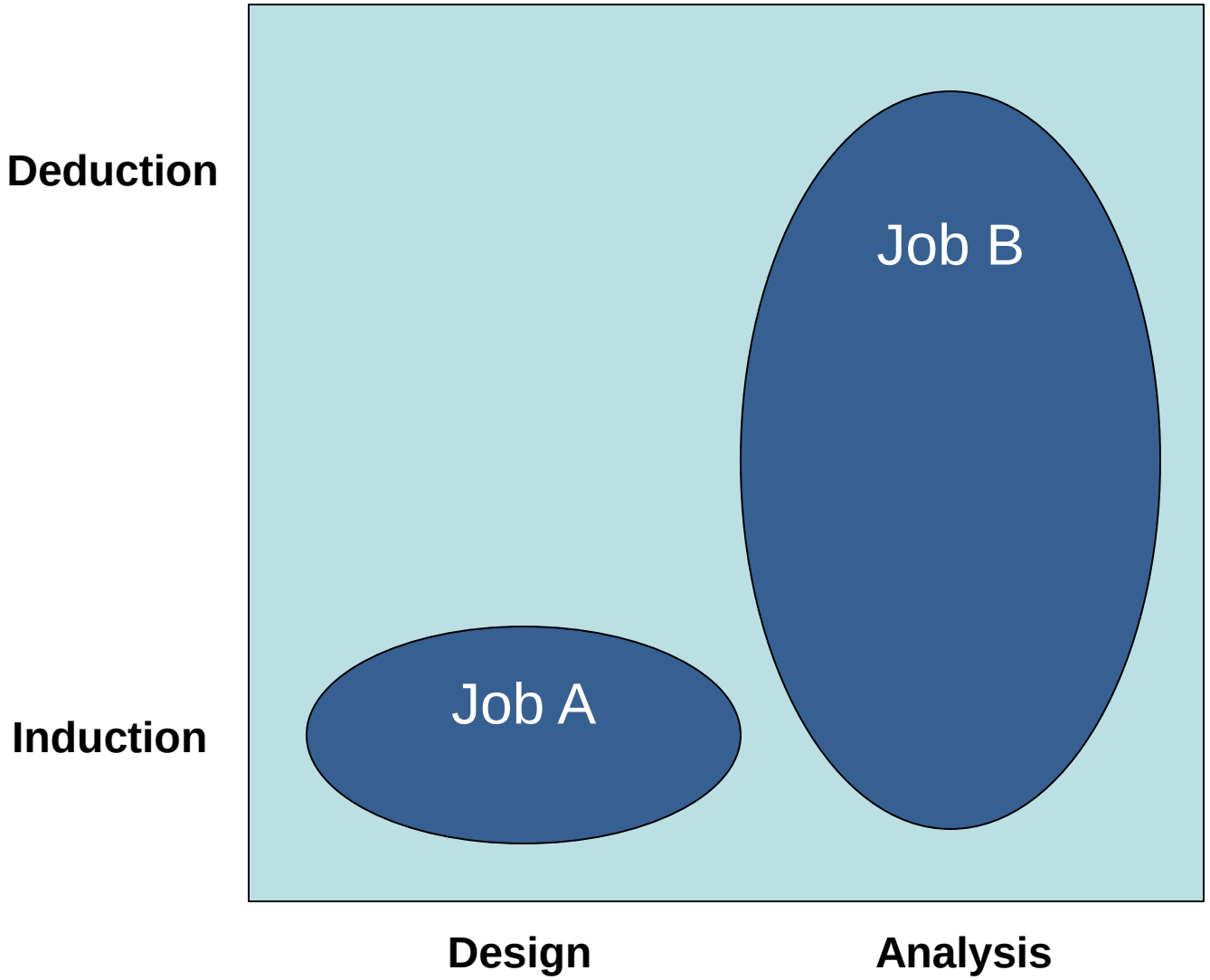
DIDA Diagrams

Deduction and Induction

Design and Analysis



DIDA



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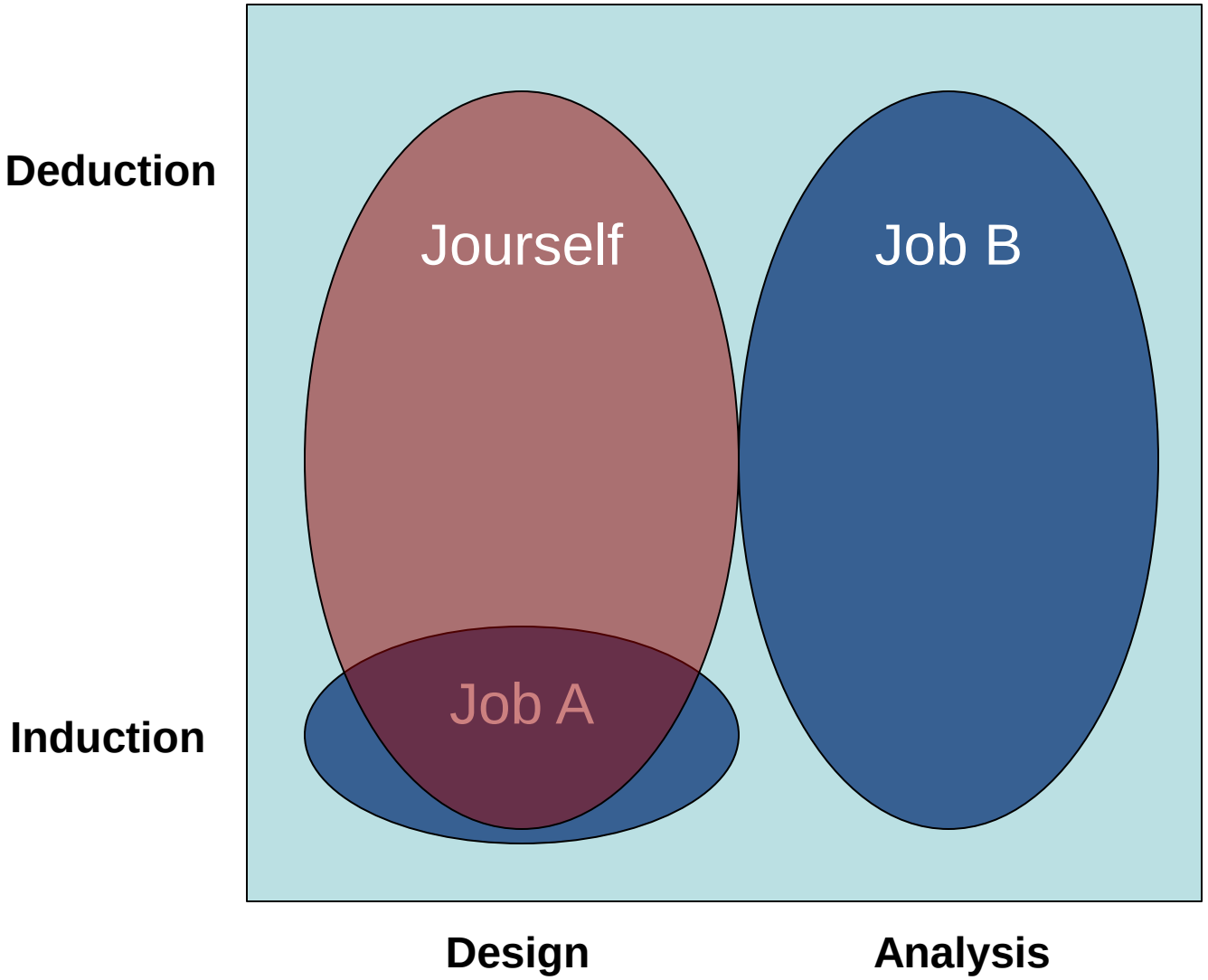

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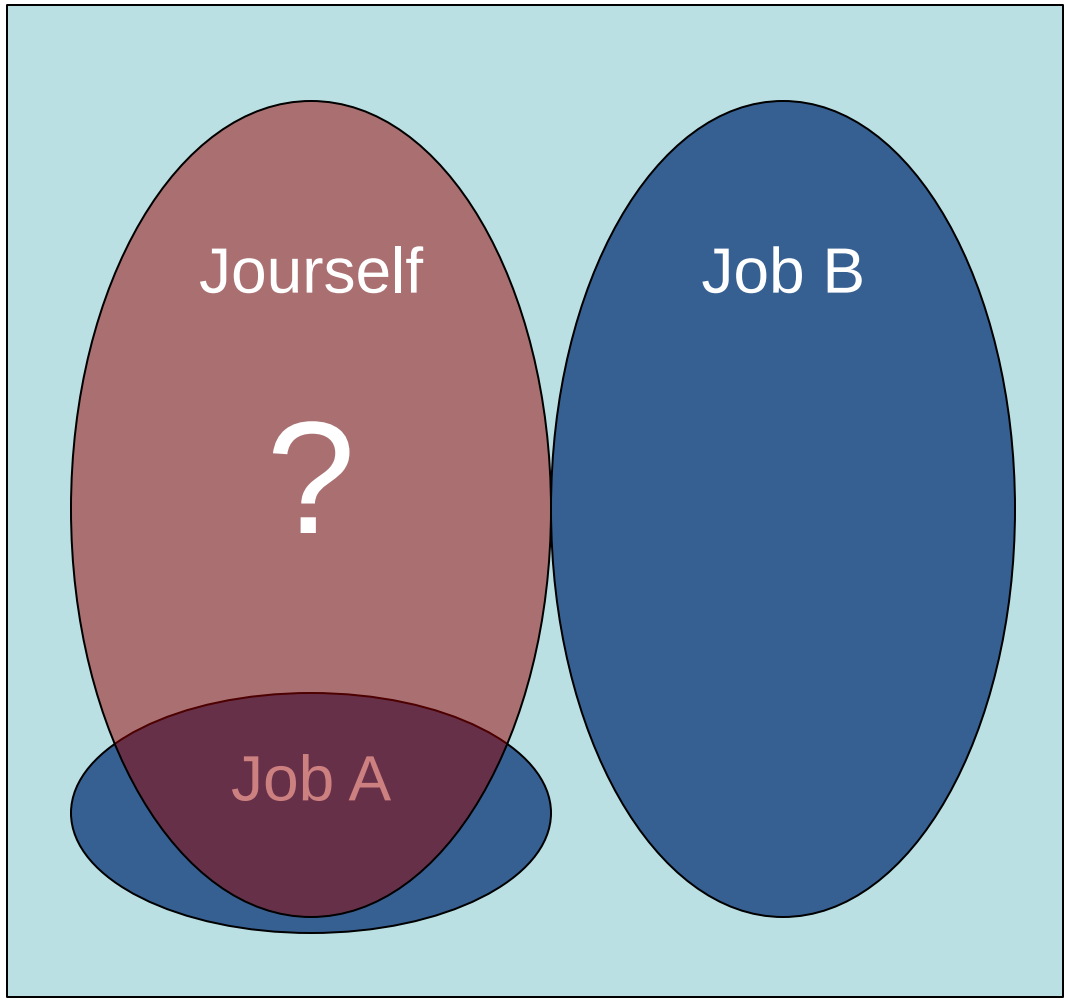


Deduction and Induction

Deduction

The logical process that, starting from a given statement, applies it to specific cases, *deriving* conclusions.

The statement is an *assumption*, of axiomatic nature.

The conclusion is certain.

Induction

The logical process that, starting from premises, *creates* a general rule.

The premises are probabilistically correct (*suppositions*).

The conclusion might be wrong.

Deduction and Induction

Example: sequence of numbers

$[x_n]$ = 2, 3, 5, 8, ?, ?

Deduction and Induction

Example: sequence of numbers

$[x_n]$ = 2, 3, 5, 8, 13, 21, ... **induction**

a) $x_1 = 2$, $x_2 = 3$
b) $x_n = x_{n-1} + x_{n-2}$ whatever n > 2

→ $[x_n]$ = 2, 3, 5, 8, 13, 21, ... **deduction**

Deduction and Induction

Example: sequence of numbers

$[x_n]$ = 2, 3, 5, 8, 12, 17, ... **induction**

a) $x_1 = 2$, $x_2 = 3$
b) $x_n = x_{n-1} + (n-1)$ whatever n > 2

→ $[x_n]$ = 2, 3, 5, 8, 12, 17, ... **deduction**

Abduction

The logical process that, starting from a given statement, adding some observations, *generates* conclusions

The statement is an *assumption.*

Observations are probabilistically correct (*suppositions*).

The conclusion might be wrong.

Deduction and Induction in Jobs

Equally relevant.

How to measure your attitude?

Do you feel you have better predisposition towards deduction or induction?

Write down it on paper: Deduction / Induction / Both

Design and Analysis

Design (Synthesis)

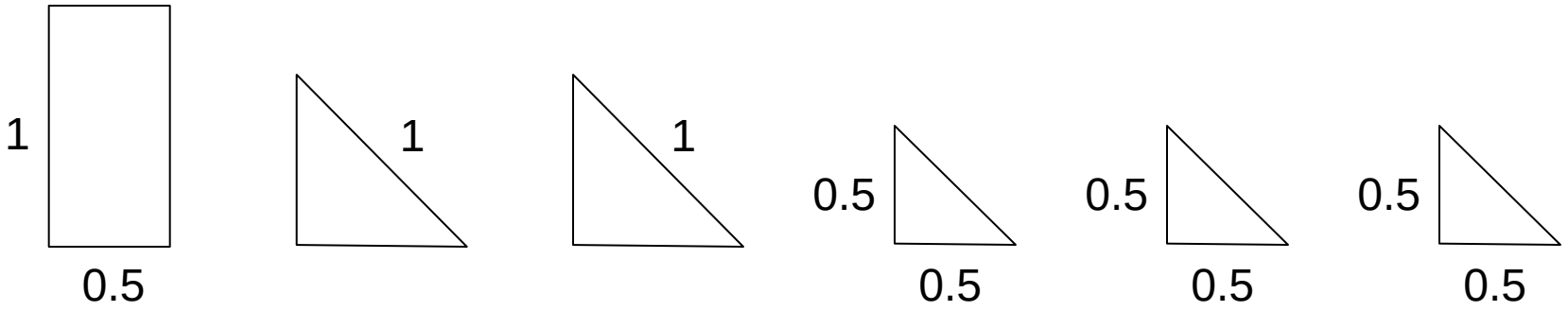
The process that assembles components to achieve a product.

Analysis

The process that decomposes a system into subsystems.

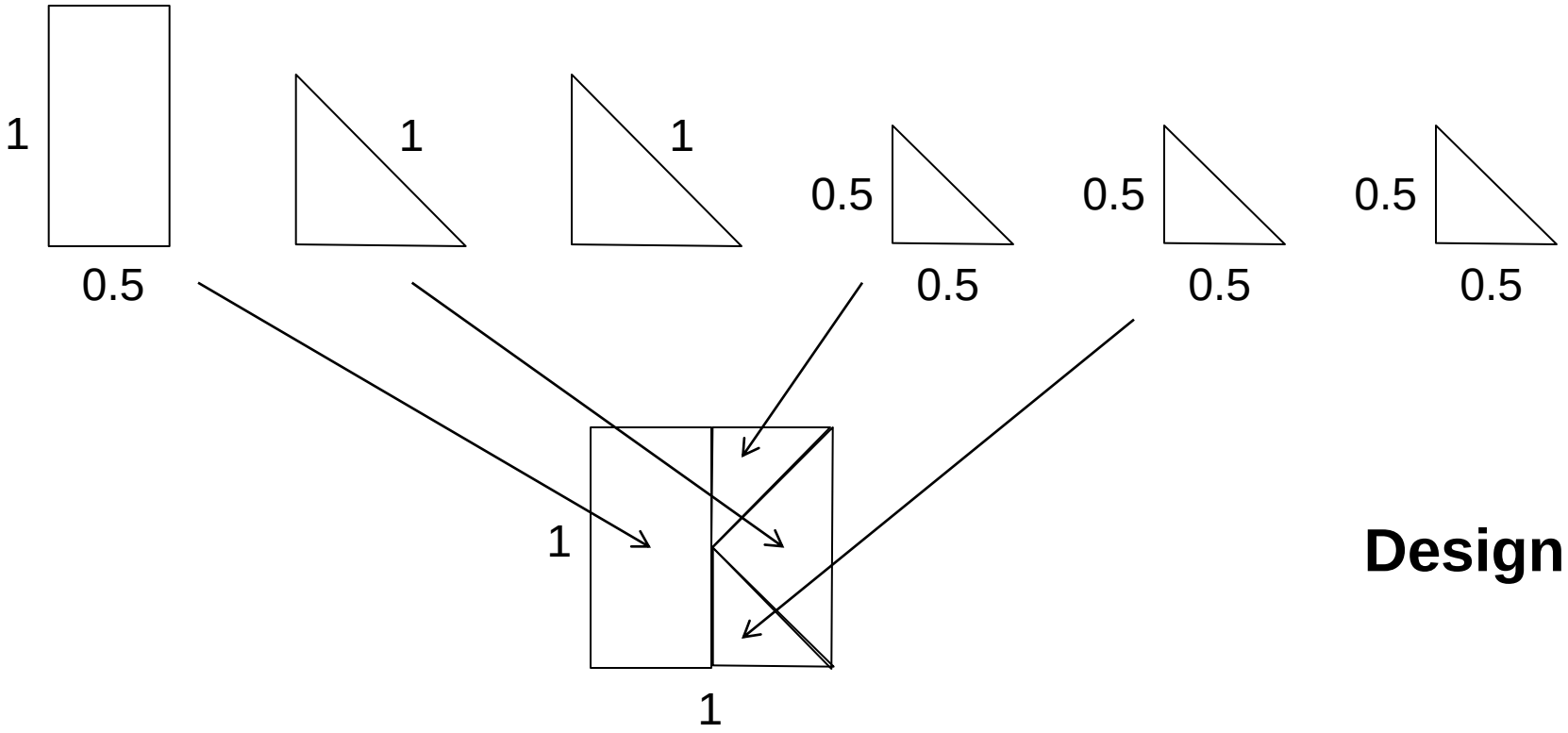
Design and Analysis

Example: draw a square of side 1 using the following pieces (not necessarily all of them)



Design and Analysis

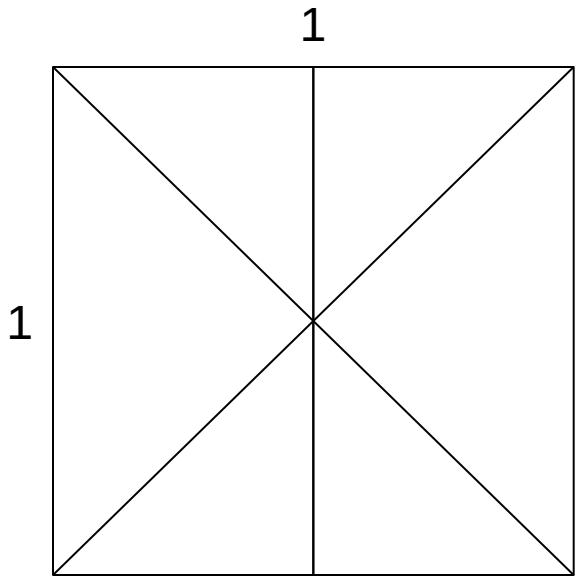
Example: draw a square of side 1 using the following pieces (not necessarily all of them)



Design

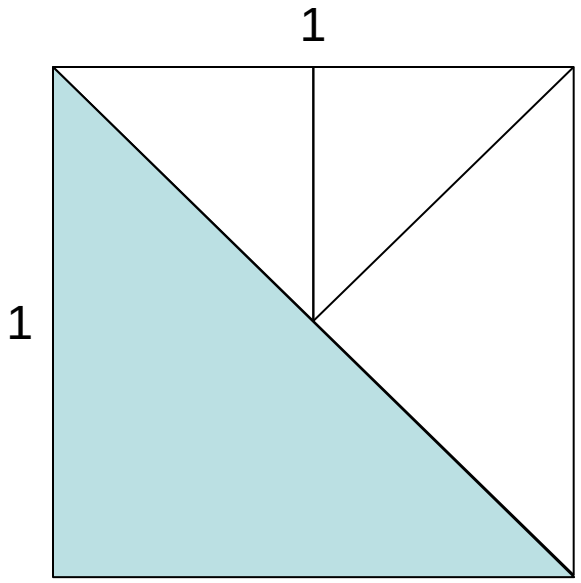
Design and Analysis

Example: how many triangles can be found in this figure?



Design and Analysis

Example: how many triangles can be found in this figure?

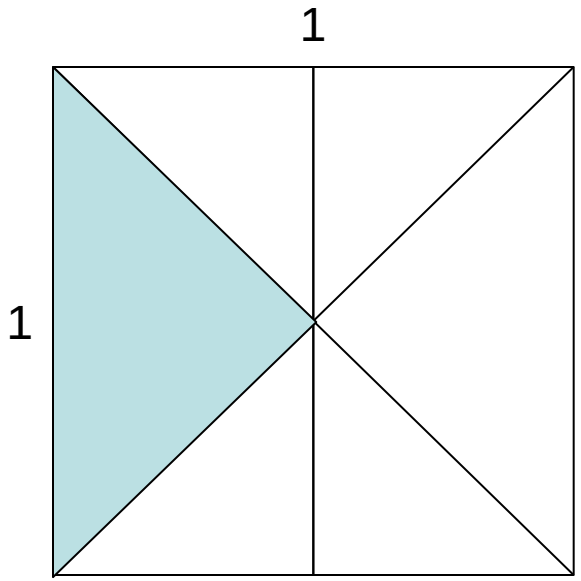


4 like this one

Analysis

Design and Analysis

Example: how many triangles can be found in this figure?

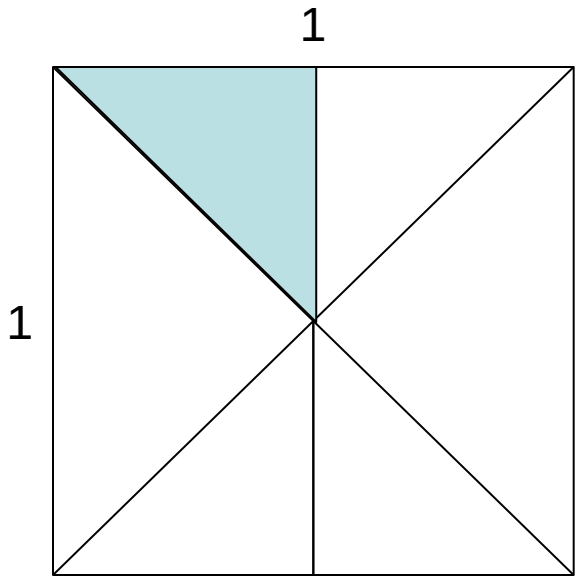


4 + 4 like this one

Analysis

Design and Analysis

Example: how many triangles can be found in this figure?



4 + 4 + 4 likes this one = 12

Analysis

Design and Analysis in Jobs

They are relevant according to the job role.

- Design skills are relevant for:
line managers, software engineers, architects, etc.
- Analytical skills are relevant for:
system or project managers, data analysts, accountants, etc.

How to measure your attitude?

Do you feel you have better predisposition
towards design or analysis?

Write down it on paper: Design / Analysis / Both

DIDA in Jobs

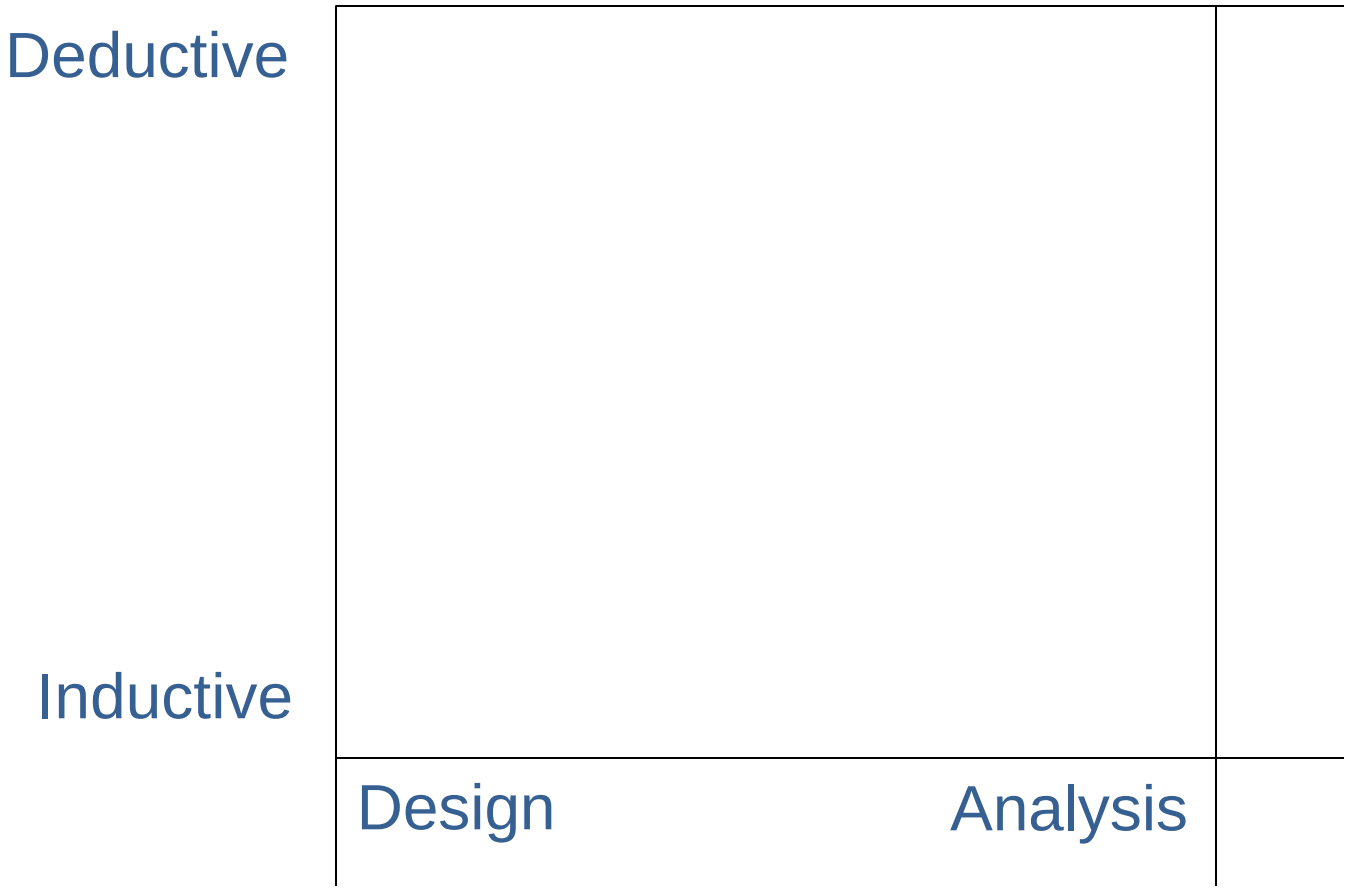
How to measure your attitude?

Test yourself through the Index of Learning Styles (ILS) at:
http://www.engr.ncsu.edu/learningstyles/ilsweb.html

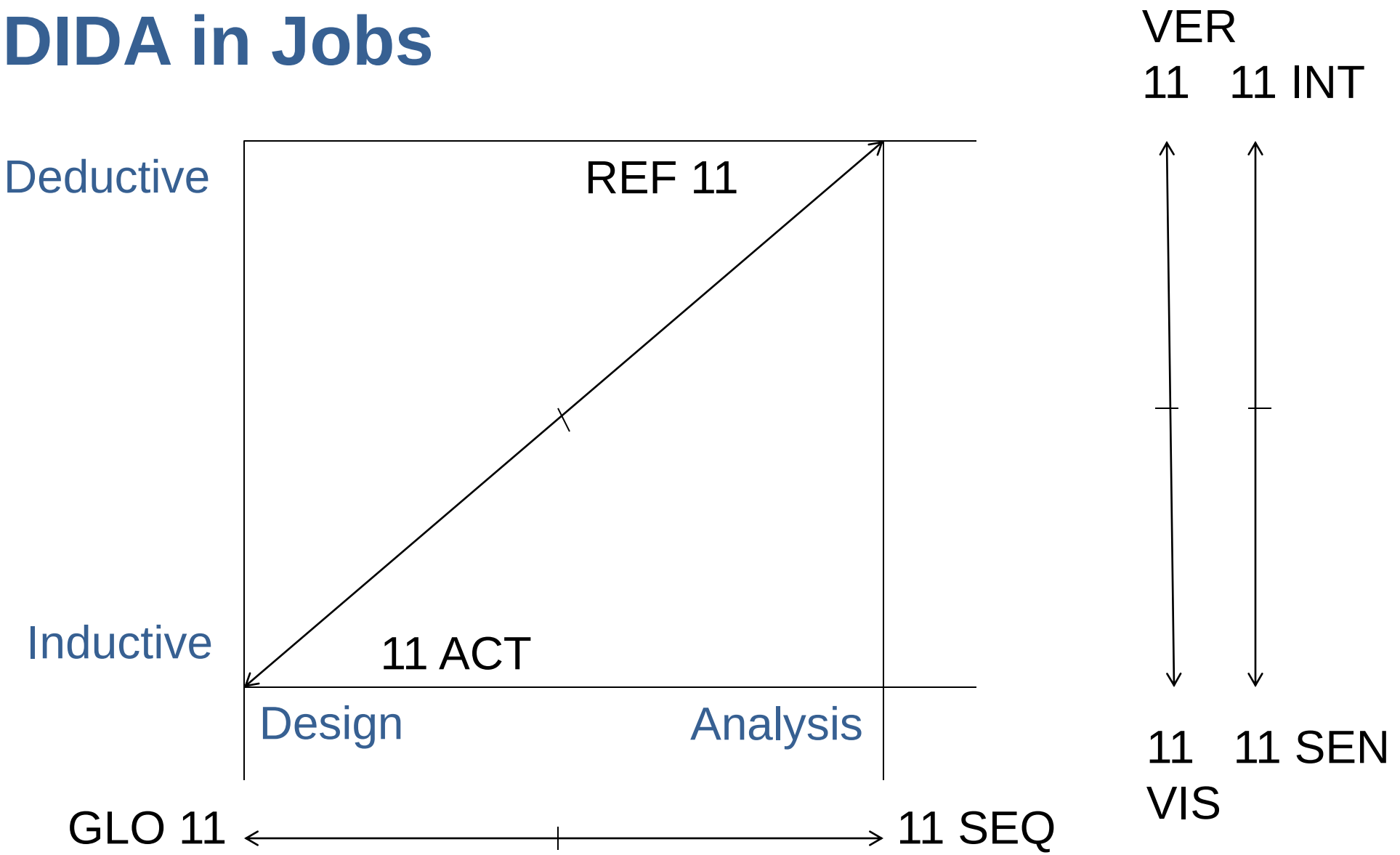
Description of the styles and hints:
http://www4.ncsu.edu/unity/lockers/users/f/felder/public/ILSdir/styles.htm

VERBAL	11	⟷	11	VISUAL
GLOBAL	11	⟷	11	SEQUENTIAL
ACTIVE	11	⟷	11	REFLECTIVE
INTUITIVE	11	⟷	11	SENSING

DIDA in Jobs



DIDA in Jobs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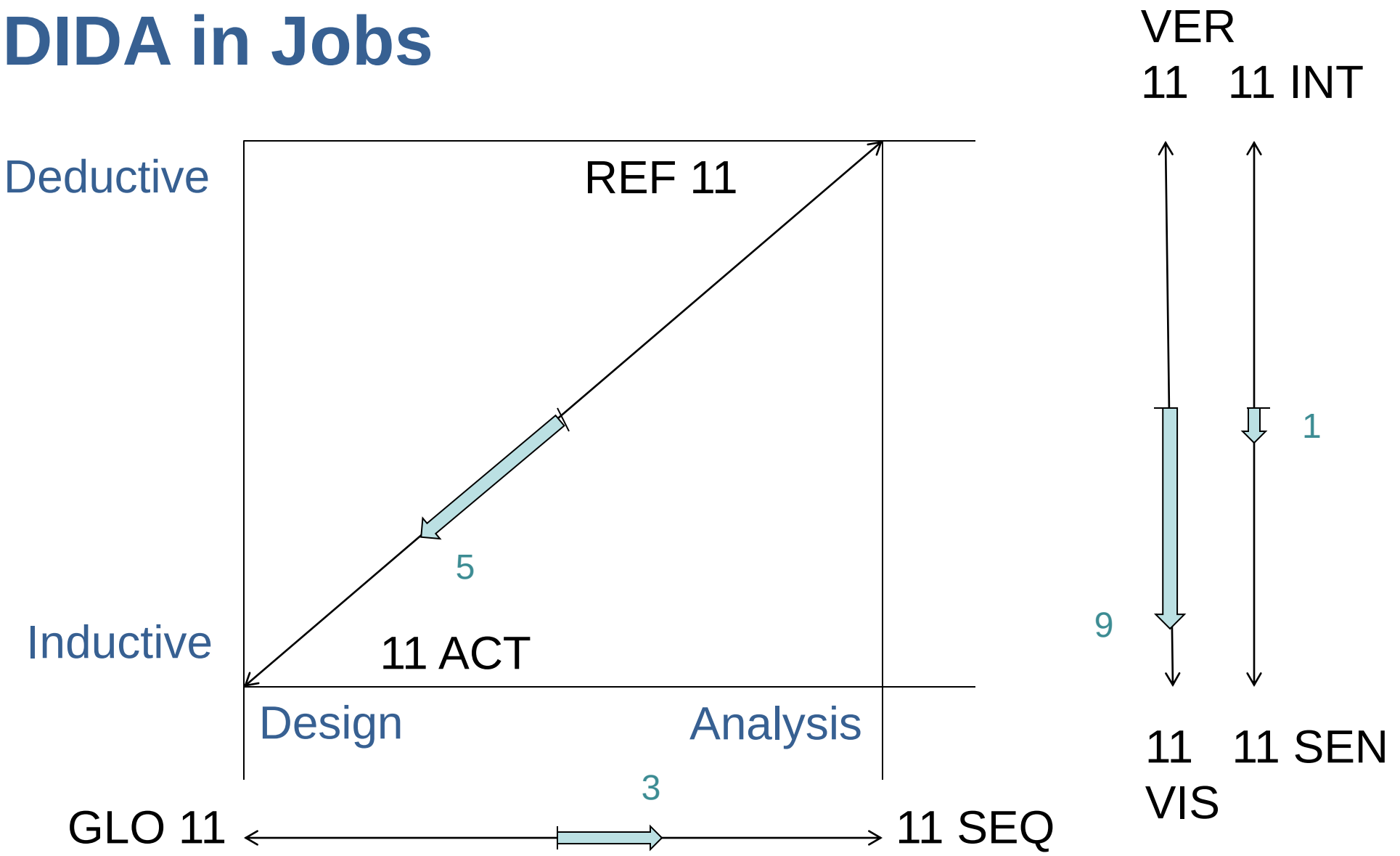
DIDA in Jobs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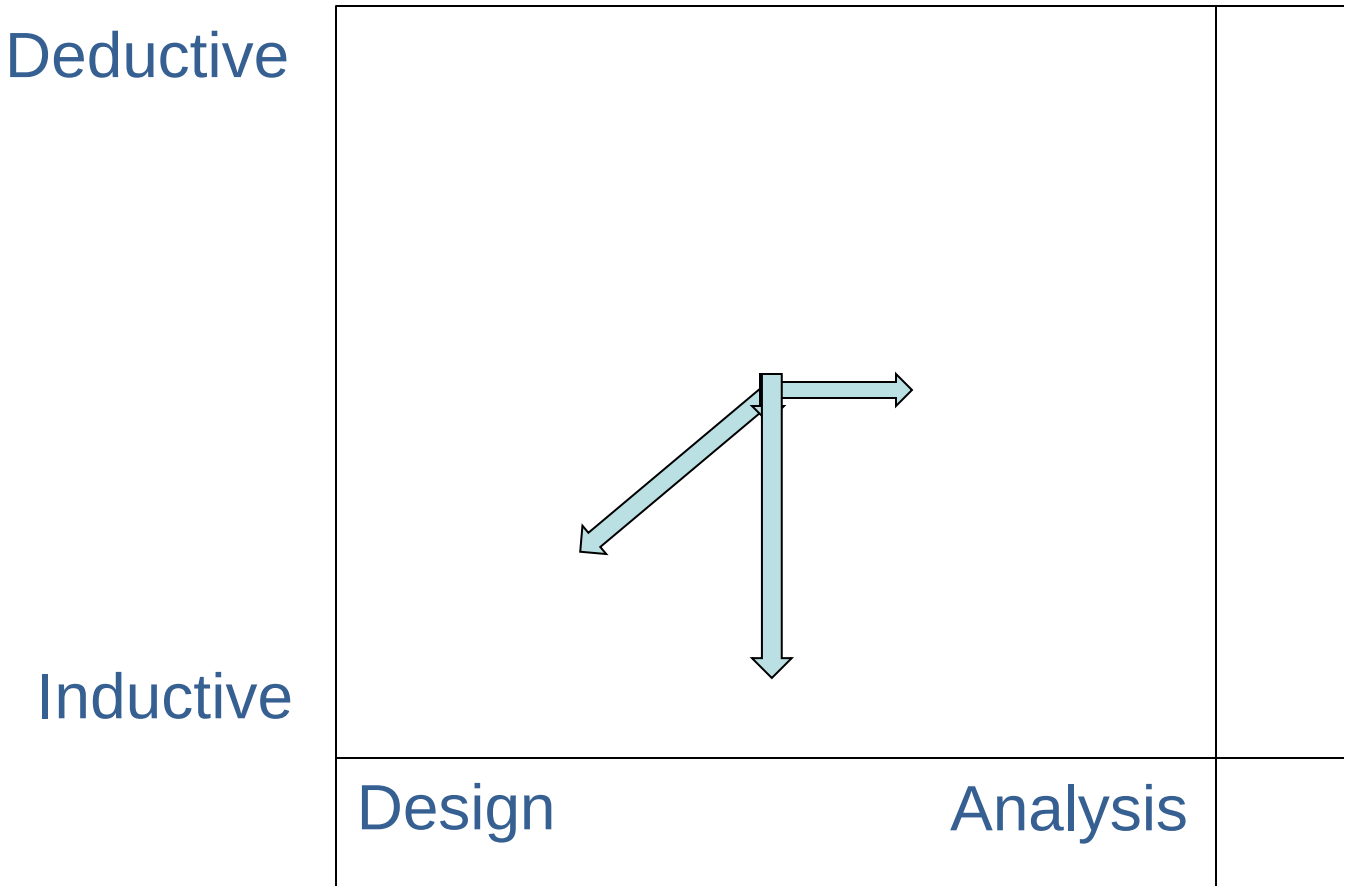
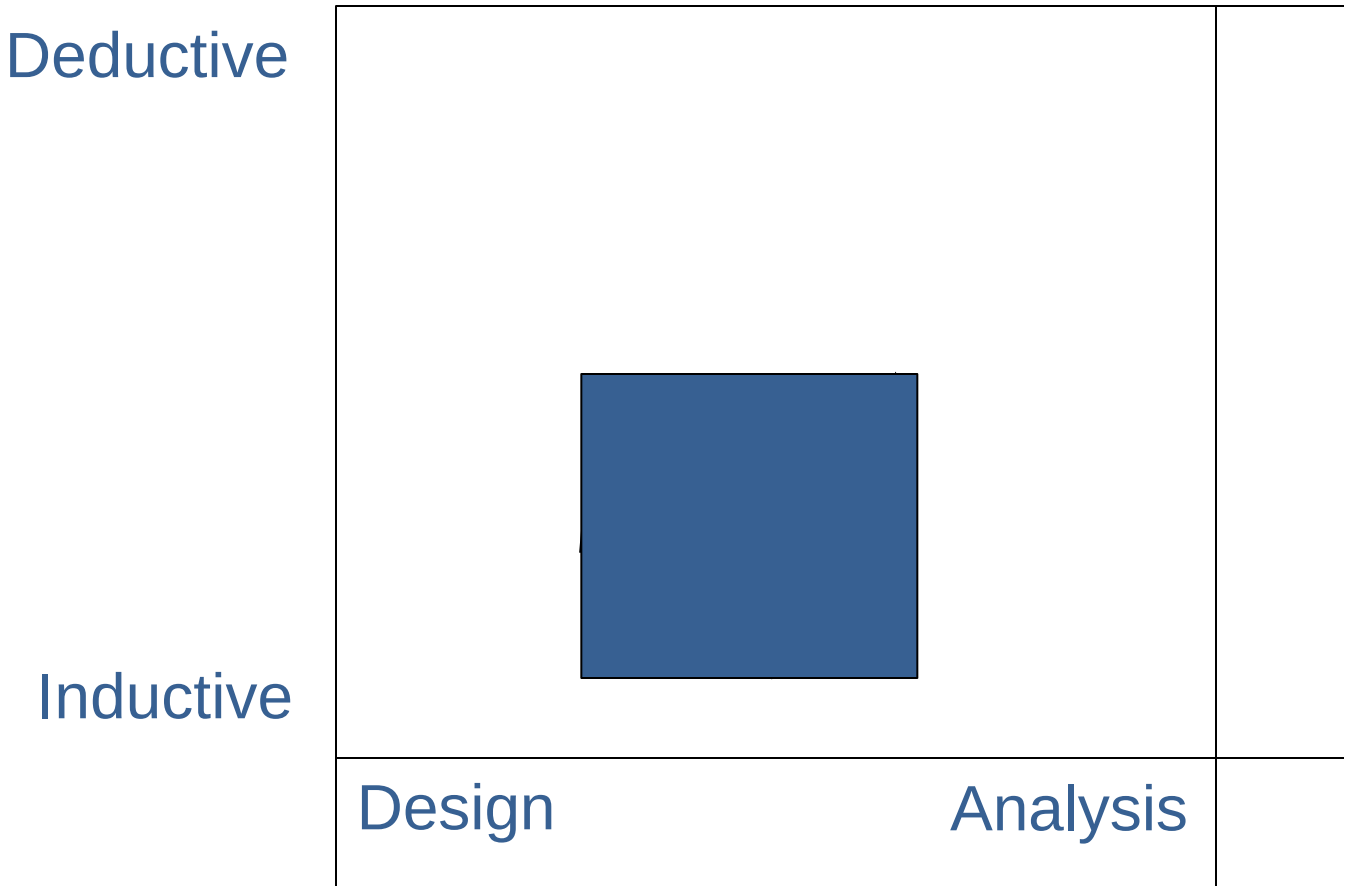
DIDA in Jobs



DIDA in Jobs



Test #5

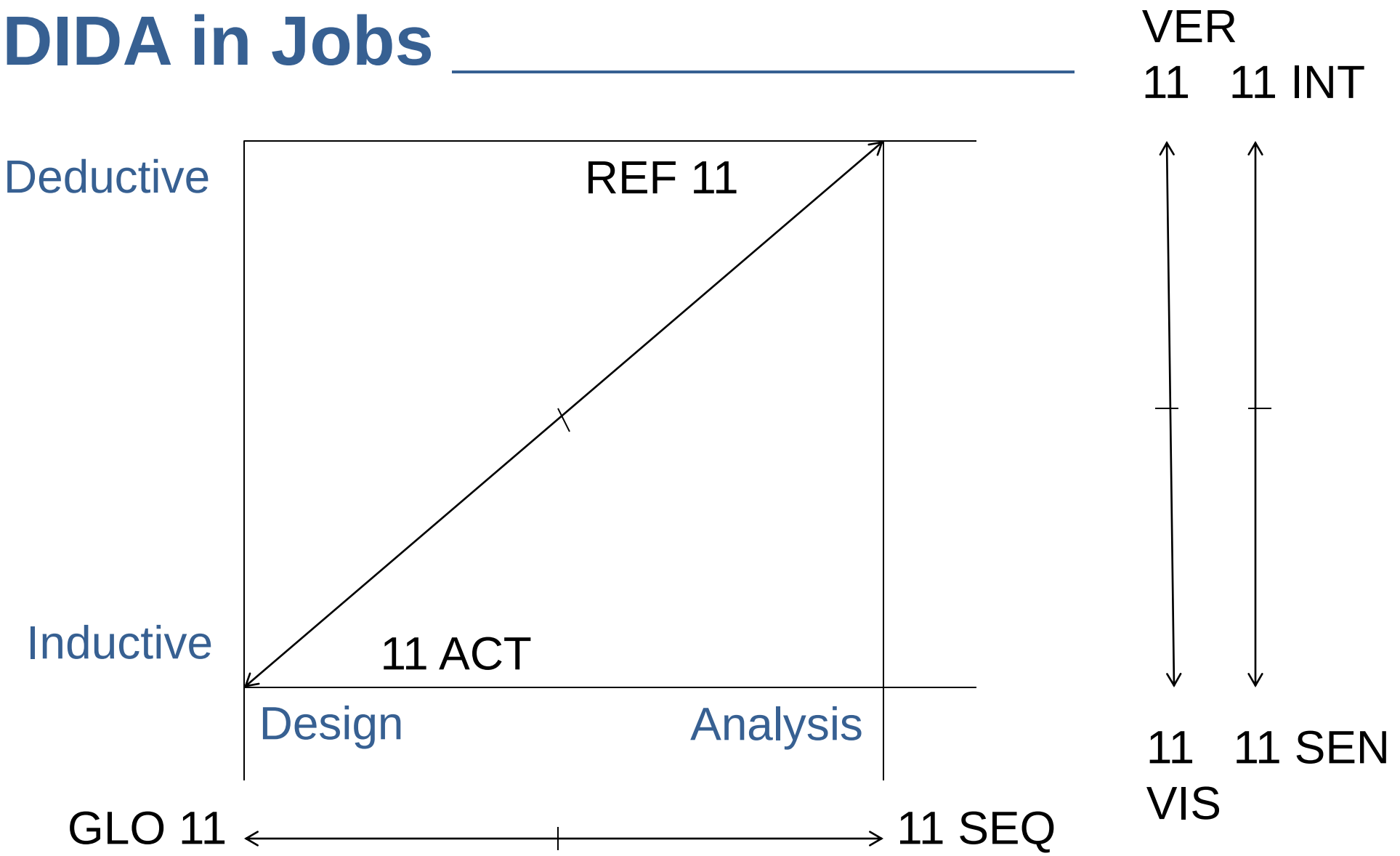
Test yourself through the ILS. NOW
http://www.engr.ncsu.edu/learningstyles/ilsweb.html

Draw the arrows on paper and find your area of prevalence. Give it to instructor.

Then, fill the Google form below

www.robertoverdone.org →
Teaching → PMSS → Form and Files → Test #5

DIDA in Jobs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