



A collage of various analytical chemistry and data visualization elements. It includes a lightbulb with a brain-like filament, a 3D pie chart, a flowchart with arrows, laboratory glassware like test tubes and flasks, and a smartphone displaying data. The background features a dark area with floating black circles and diamonds.

# EPEA516 ANALYTICAL SKILLS II

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# Learning Outcomes



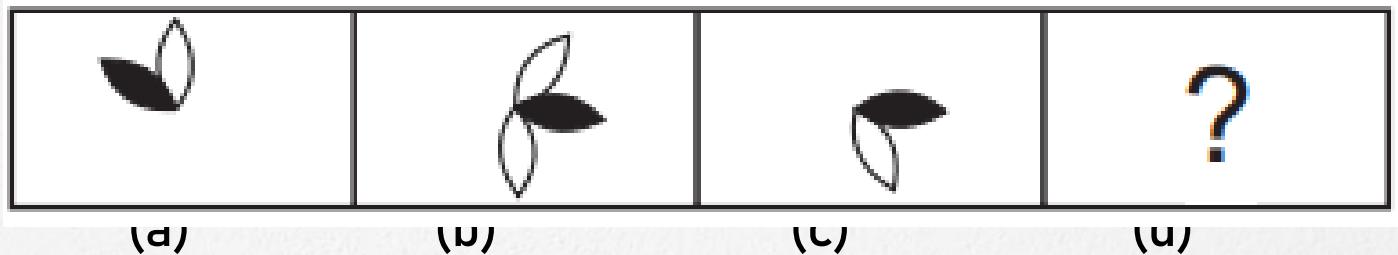
After this lecture, you will be able to

- develop understanding about the basics of analogy and classification of figures,
- analyze different types of analogy and classification of figures,
- solve various problems relating to analogy and classification of figures.

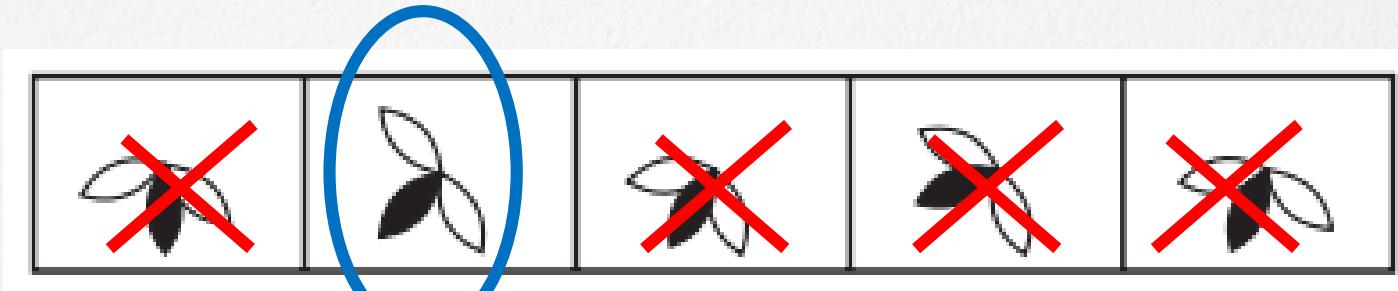
# Analogy of Figures

- Analogy – Corresponding
- Pair – Related Figures
- Similar Relationship – Other Two Figures

# Problem



- Options



The black leaf rotates  $135^0$  clock wise and white leaf rotates  $45^0$  clock wise. A new white leaf attached with black leaf at  $90^0$  degree.

# Problem

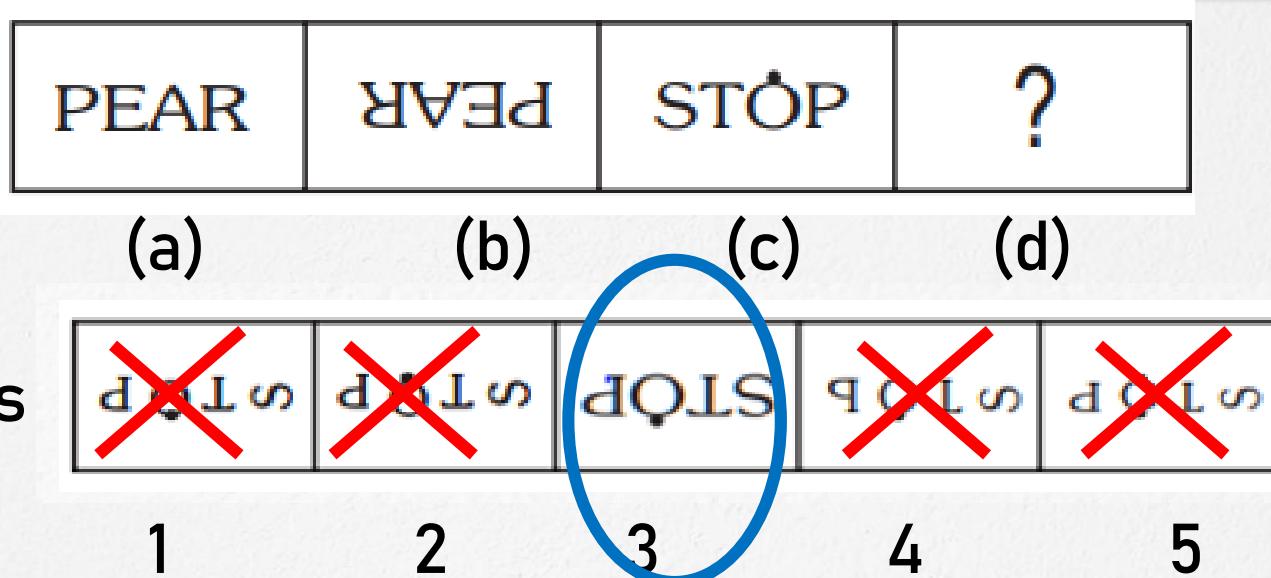
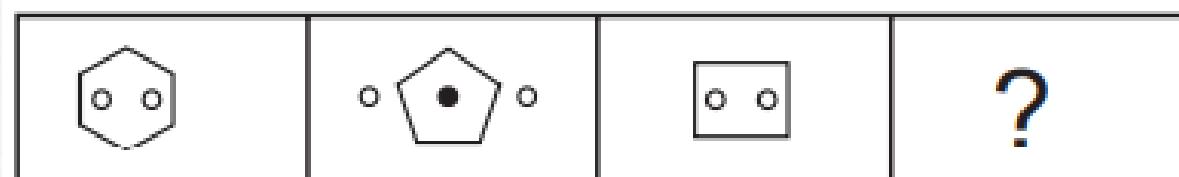


Figure rotates through 180°

# Problem



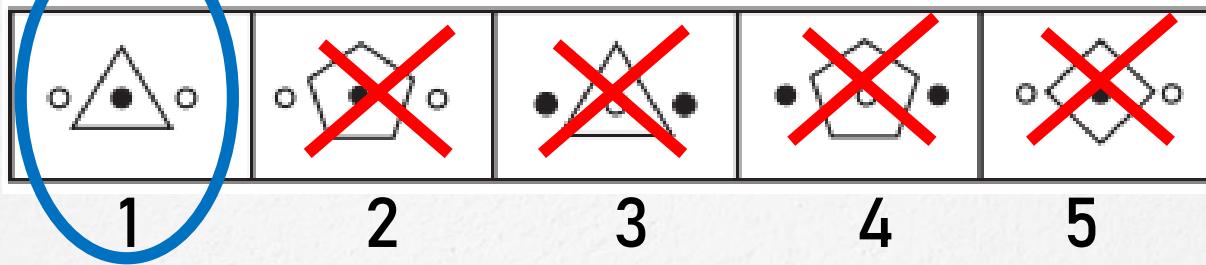
(a)

(b)

(c)

(d)

- Options

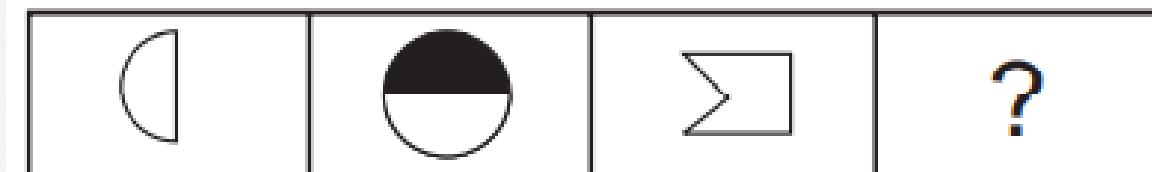


Six - five - Four

Elements present inside the figure moves outside.

A new shaded circular element introduced inside.

# Problem



(a)

(b)

(c)

?

- Options

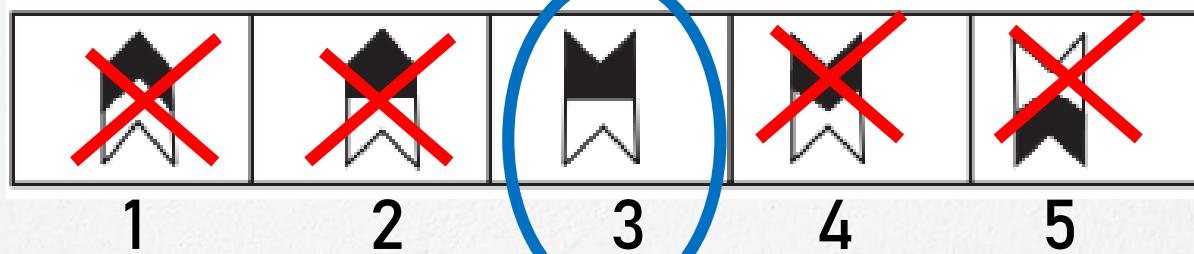
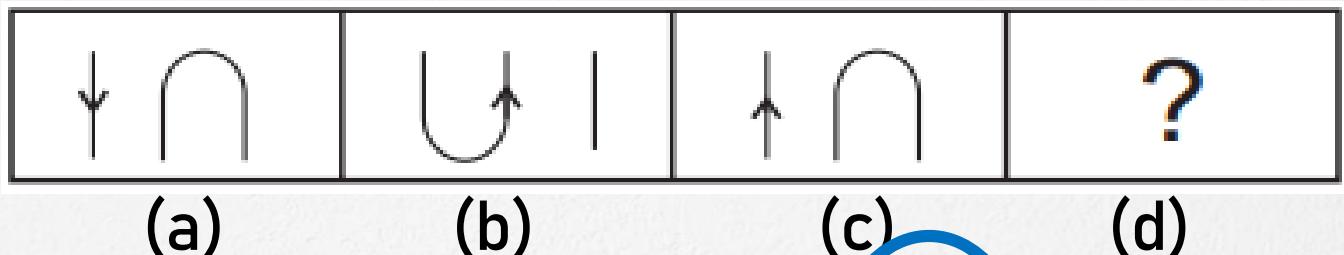


Figure rotates 90° anti -clock wise.

Shaded inverted image added to the top.

# Problem



- Options

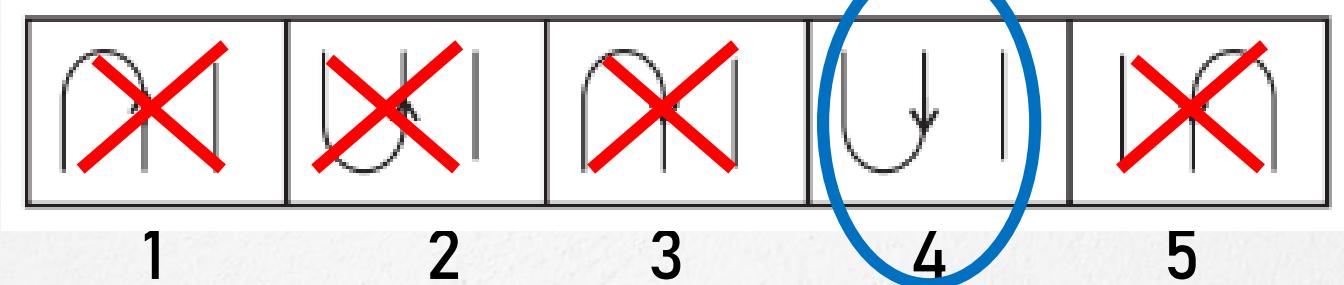


Figure gets rotates through  $180^0$

Arrow head moves to U - shaped element

# Problem

( ) ( ( )	) ) ) ) ( (	?	( ( ( ) )
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(a)

(b)

(c)

(d)

- Options

) ( ) ) )	) ( ) ( ( (	) ( ( ) ) ( )	) ) ) ) ) ( (	) ( ) ) ) ( )
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1

2

3

4

5

From left to right,

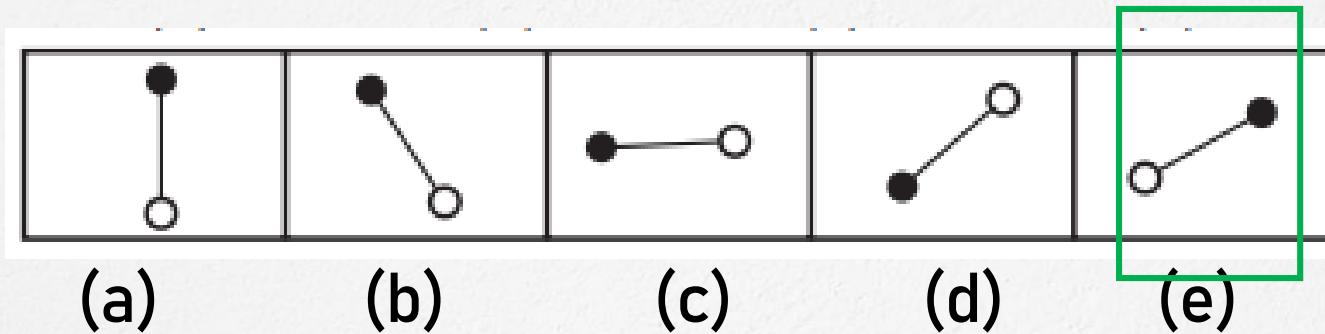
the first, third and fifth arcs get laterally inverted.

# Classification of Figures

- Odd Man Out
- Set of Figures
- Similar Characteristics Features - Except One
- Select Figure - Differs

# Problem

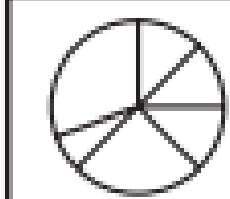
- Choose the figure which is different from the rest.



All rotates in anti clock wise direction except option (e)

# Problem

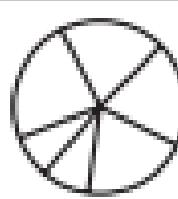
- Choose the figure which is different from the rest.



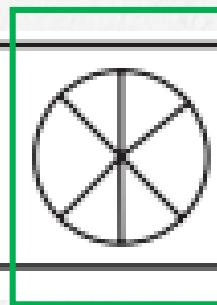
(a)



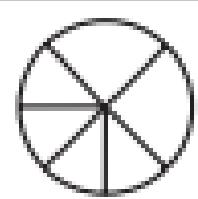
(b)



(c)



(d)

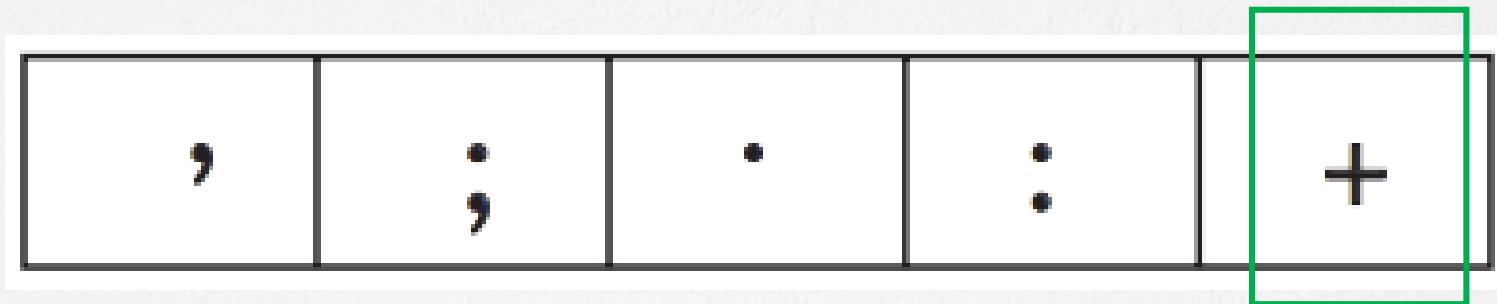


(e)

All diameters are intersecting with each other.

# Problem

- Choose the figure which is different from the rest.



(a)

(b)

(c)

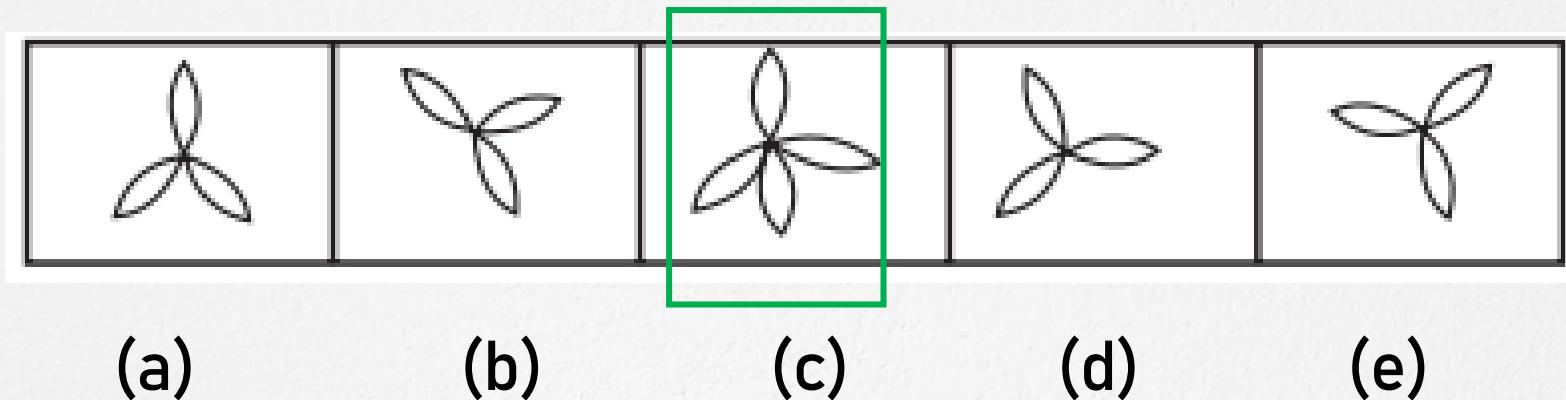
(d)

(e)

option (e) is mathematical symbol.

# Problem

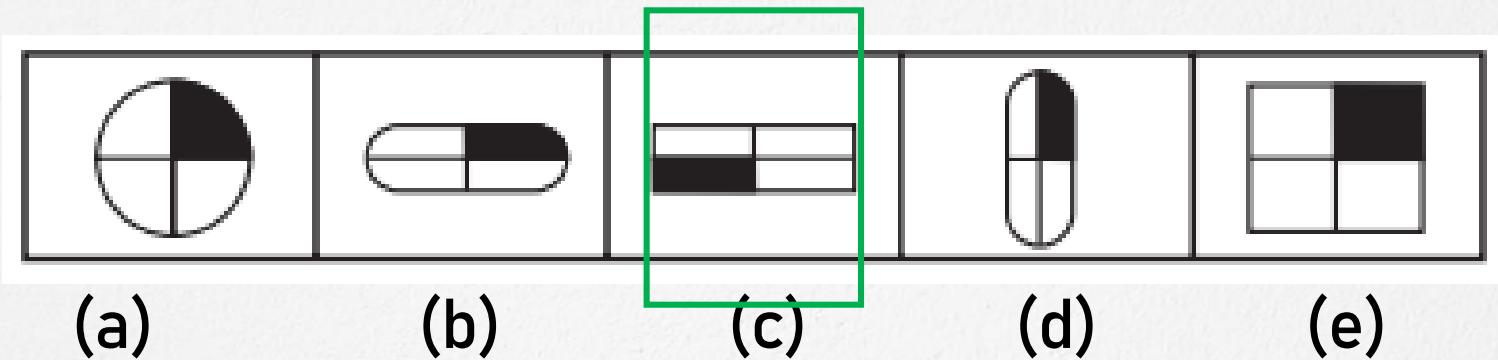
- Choose the figure which is different from the rest.



Except option/figure(c) rest all has three petals.

# Problem

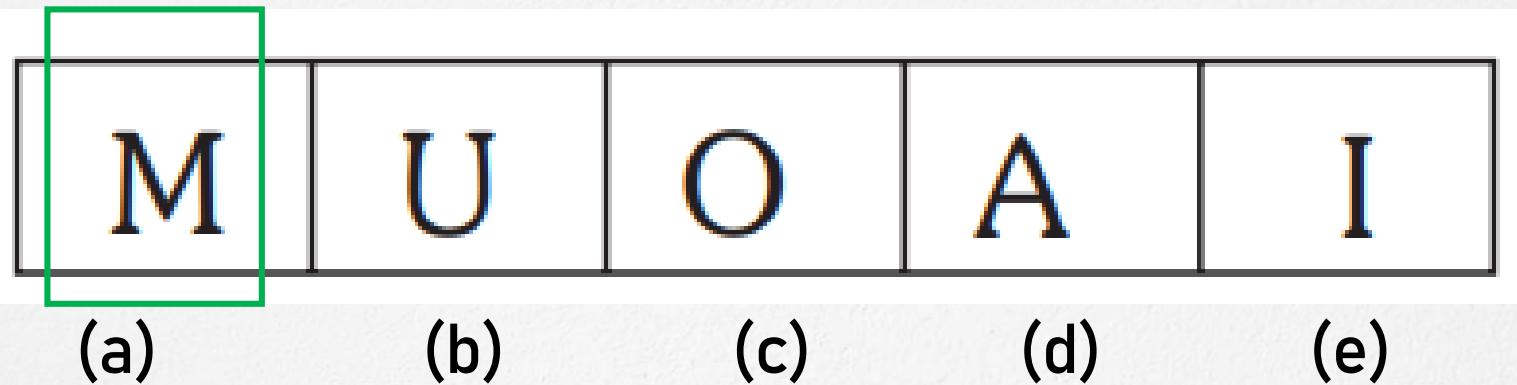
- Choose the figure which is different from the rest.



The shaded region is present on the left bottom region, where as rest all has on top right region.

# Problem

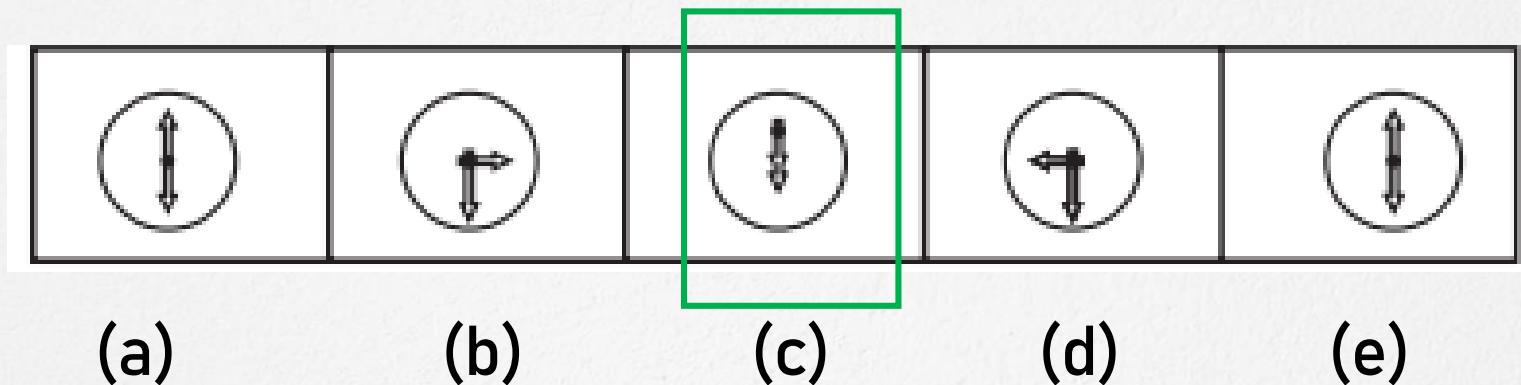
- Choose the figure which is different from the rest.



M - consonant, rest - vowel

# Problem

- Choose the figure which is different from the rest.



Both arrows are facing towards the centre.

# Conclusion

- Analogy of Figures
  - Pair - Related Figures
  - Similar relationship - Two other figures
- Classification of Figures
  - Set of Figures
  - Similar Characteristics Features - Except One
  - Select Figure - Differs

# Summary

- Non-Verbal Reasoning
  - Analogy of Figures
  - Classification of Figures

That's all for now...