

# Child intelligence measures(2)

# *Objectives*

To know Child intelligence measures. •

To know IQ score. •

To know [Sex and intelligence](#). •

# What is the Meaning of an IQ Test Score?

An IQ score is an Intelligence Quotient, which •  
is a measure of intelligence, primarily  
reasoning ability. The higher the score, the  
greater the reasoning ability.

The first intelligence test was created in 1905 by Alfred Binet and Théophile Simon to determine which French school children were too “slow” to benefit from regular instruction. Binet came up with the idea of mental age when he noticed that children are increasingly able to learn difficult concepts and perform difficult tasks as they get older

Most children reach the same level of • complexity at about the same time, but some children are slower reaching those levels. A 6-year-old child who can do no more than a 3-year-old has a mental age of 3. Wilhelm Stern divided the mental age by the chronological age to get a “Mental Quotient.”

Mental Age/Chronological Age = Mental Quotient •

A 6-year-old able to do only what a 3-year-old can do has a Mental Quotient of 0.5 or  $\frac{1}{2}$  (3 divided by 6). Lewis Terman later multiplied the Mental Quotient by 100 to remove the fraction and the Intelligence Quotient (IQ) was born! •

Mental Age/Chronological Age X 100 = Intelligence Quotient

The 6-year-old with the Mental Quotient of  $\frac{1}{2}$  has an IQ of 50.

The majority of people have an IQ between 85 and 115.

# A Breakdown of IQ Scores

The average score on an IQ test is 100. Sixty-  
• eight percent of IQ scores fall within one standard deviation of the mean. So that means that the majority of people have an IQ score between 85 and 115.

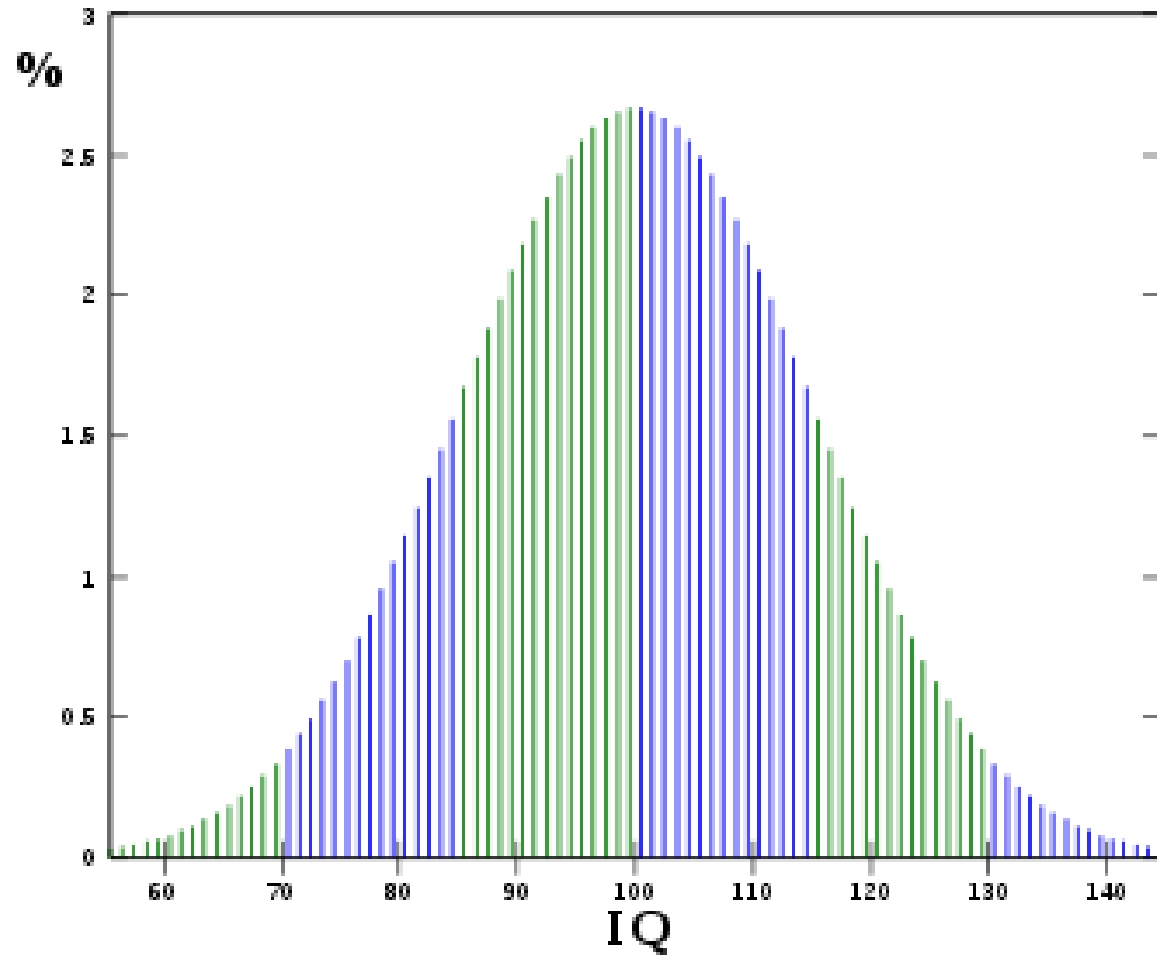
# IQ scores

- 1 to 24 - Profound mental disability
- 25 to 39 - Severe mental disability
- 40 to 54 - Moderate mental disability
- 55 to 69 - Mild mental disability



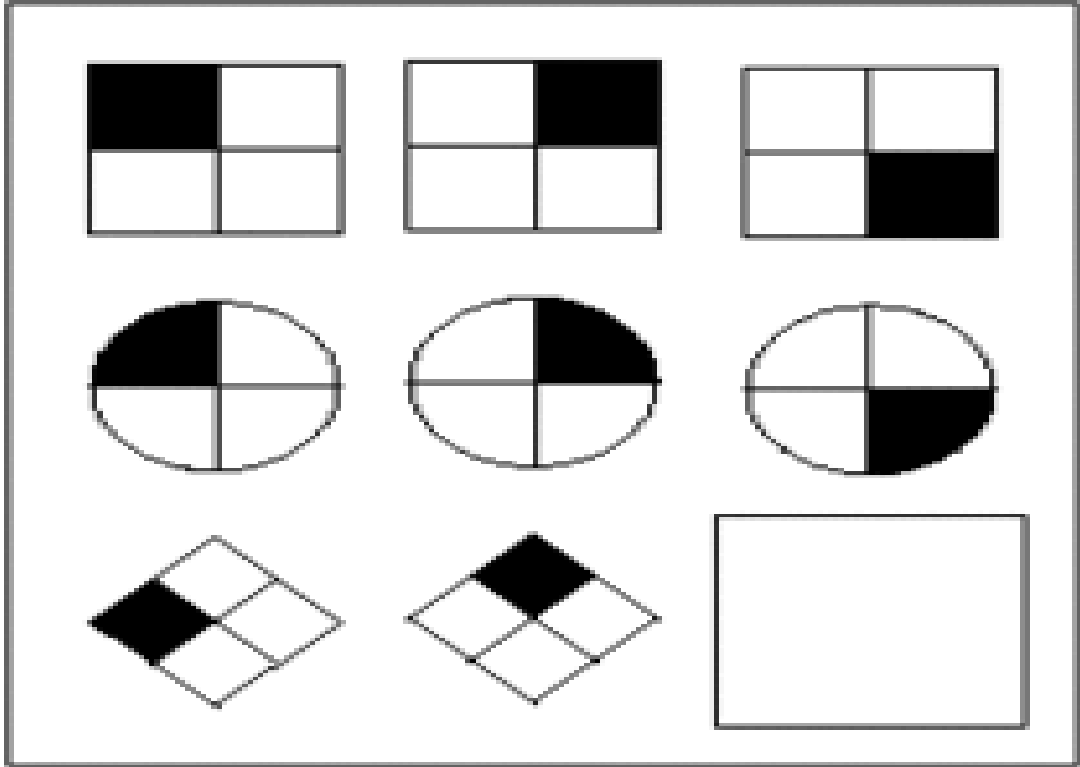
- 70 to 84 - Borderline mental disability
- 85 to 114 - Average intelligence
- 115 to 129 - Above average; bright
- 130 to 144 - Moderately gifted
- 145 to 159 - Highly gifted
- 160 to 179 - Exceptionally gifted
- 180 and up - Profoundly gifted

If we took everyone's IQ scores and plotted them, we would see they would be distributed in a normal bell curve. That means that most scores would fall somewhere in the center of that bell curve. The score in the absolute center of the bell curve is 100 and that is where we would expect most scores to fall, or where we expect them to cluster.



# Wechsler Intelligence Scale for Children

- Vocabulary - examinee is asked to define a provided word.
  - Similarities - asking how two words are alike/similar.
  - Comprehension - questions about social situations or common concepts.
  - Information - general knowledge questions.
- Word reasoning- a task involving clues that lead to a specific word, each clue adds more information about the object/word/concept •



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- Block Design - children put together red-and-white blocks in a pattern according to a displayed model( timed).
- Picture Concepts - children are provided with a series of pictures presented in rows (either two or three rows) and asked to determine which pictures go together, one from each row.
- Matrix Reasoning - children are shown an array of pictures with one missing square, and select the picture that fits the array from five options.
- Picture Completion - children are shown artwork of common objects with a missing part, and asked to identify the missing part by pointing and/or naming.

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- Coding - children under 8 mark rows of shapes with different lines according to a code, children over 8 transcribe a digit-symbol code. The task is time-limited.
- Symbol Search - children are given rows of symbols and target symbols, and asked to mark whether or not the target symbols appear in each row.
- Cancellation - children scan random and structured arrangements of pictures and marks specific target pictures within a limited amount of time.

- The Verbal Comprehension Index includes four tests: •
- Similarities: Abstract verbal reasoning (e.g., "In what way are an apple and a pear alike?")
  - Vocabulary: The degree to which one has learned, been able to comprehend and verbally express vocabulary (e.g., "What is a guitar?")
  - Information : Degree of general information acquired from [culture](#) (e.g., "Who is the president of Iraq?")
  - Comprehension : Ability to deal with abstract social conventions, rules and expressions (e.g., "What does *Kill 2 birds with 1 stone* metaphorically mean?")



# Sex and intelligence

Most IQ tests are constructed so that there are no overall score differences between females and males. •

# *Questions*

What is the meaning of an IQ test score? •

What are the IQ scores? •