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WISC-IV

Wechsler Intelligence Scale For Children- Fourth Edition

Descriptive and Graphical Report

Area of Assessment: IQ and cognitive functioning

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Reason for Referral:

Jane Doe is a 7.10 year old female child who is expected to attend 2nd Grade at xxxx Park Elementary in xxxx County. She was referred for a psychometric assessment to determine gifted program eligibility.

Tests Used:

Wechsler Intelligence Scale for Children (WISC-IV) - Fourth Edition

Behavior Observations:

Testing was conducted at the child's home. Jane appeared physically healthy, alert and oriented. She seemed comfortable and relaxed towards the testing process as she was friendly, sociable and cooperative. Her level of motor activity remained within normal ranges for her age and no signs of impulsive behavior or inattention were noted. Jane showed exceptional verbal reasoning skills, as her choice and use of words were well above average for her age. Instructions did not have to be repeated and her eyes remained on task at all times. Jane showed right handed dominance and a tripod pencil grip.

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Jane Doe

7.10 years old

WISC-V SCORES SUMMARY

WISC-IV COMPOSITE	SCORE	Classification
Verbal Comprehension Index (VCI)	126	High Average
Perceptual Reasoning Index (PRI)	135	Moderately Gifted
Working Memory Index (WMI)	116	High Average
Processing Speed Index (PSI)	112	Average
Full Scale IQ (FSIQ)	130	Moderately Gifted

Composite Scores Summary

Scale	Sum of Scaled Scores	Composite Score	Percentile Rank	95% Confidence Interval	Qualitative Description
Verbal Comprehension (VCI)	43	126	96	118-131	Superior
Perceptual Reasoning (PRI)	47	135	99	125-140	Very Superior
Working Memory (WMI)	26	116	86	107-122	High Average
Processing Speed (PSI)	24	112	79	102-120	High Average
Full Scale (FSIQ)	140	130	98	124-134	Very Superior

IQ reference chart

	Intelligence Classification
Under 20	Profound Mental Retardation
20-34	Severe Mental Retardation
35-49	Moderate Mental Retardation
50-69	Mild Mental Retardation
70-79	Borderline Mental Retardation
80-89	Below Average
90-114	Average Intelligence
115-129	Above Average/Bright
130-144	Moderately Gifted
145-159	Highly Gifted
160-175	Exceptionally Gifted
>175	Profoundly Gifted

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Verbal Comprehension Index

General Skill: The VCI measures verbal knowledge and understanding obtained through both formal and informal education and reflects the use of verbal skills to new situations.

Verbal Comprehension Subtest Score Summary (Total Raw Score to Scaled Score Conversions)

Subtest	Skills Measured	Raw Score	Scaled Score	Percentile Rank	Category
Similarities	Abstract thinking, verbal reasoning, perception of relationships between things and ideas, distinction between nonessential and essential features and verbal expression.	27	17	99	Superior
Vocabulary	General word knowledge (use of words and verbal fluency), verbal concept formation, long-term memory/learning ability, degree of language development, and auditory perception.	31	13	84	High Average
Comprehension	Verbal comprehension and expression, the ability to evaluate and use past experience, practical social knowledge, social judgment and common sense.	21	13	84	High Average
(Information)	General knowledge, education, exposure to relevant information, and long-term memory of his experience.	17	14	91	High Average
(Word Reasoning)	Verbal comprehension, analogical and general reasoning ability, verbal abstraction, domain knowledge, the ability to integrate and synthesize different types of information, and the ability to generate alternative concepts	16	15	95	Superior

Perceptual Reasoning Index

General Skill: The PRI measures the ability to interpret and organize visual material and to produce and test hypotheses related to problem solving.

Perceptual Reasoning Subtest Score Summary (Total Raw Score to Scaled Score Conversions)

Subtests	Skills Measured	Raw Score	Scaled Score	Percentile Rank	Category
Block Design	Ability to visualize and synthesize abstract visual stimuli, visual perception and organization, simultaneous processing, visual-motor skills and visual-spatial integration.	32	14	91	High Average
Picture Concepts	Abstract and categorical reasoning abilities.	23	18	99.6	High Average
Matrix Reasoning	Culture-fair and language-free measure of fluid intelligence and a reliable estimate of general intellectual ability.	23	15	95	High Average
(Picture Completion)	Ability to distinguish between essential and non-essential details, attention, concentration, and visual discrimination.	28	15	95	Average

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Working Memory Index

General Skill: The WMI measures immediate memory and the ability to concentrate, sustain attention, and exert mental control.

Working Memory Subtest Score Summary (Total Raw Score to Scaled Score Conversions)

Subtests	Skills Measured	Raw Score	Scaled Score	Percentile Rank	Category
Digit Span	Auditory short-term memory, sequencing, attention and concentration, auditory processing, working memory, visual-spatial imaging, cognitive flexibility and mental alertness.	15	13	84	High Average
Letter-Number Sequencing	Sequencing, mental manipulation, attention, short term auditory memory, visual-spatial imaging and processing speed.	16	13	84	High Average
(Arithmetic)	Concentration, attention, short- and long-term memory, numerical sequencing, addition, subtraction, numerical/logical reasoning and mental computation skills.	24	16	98	High Average

Processing Speed Index

General Skill: The PSI measures the ability to process visually perceived material quickly, with concentration and eye-hand coordination.

Processing Speed Subtest Scores Summary (Total Raw Score to Scaled Score Conversions)

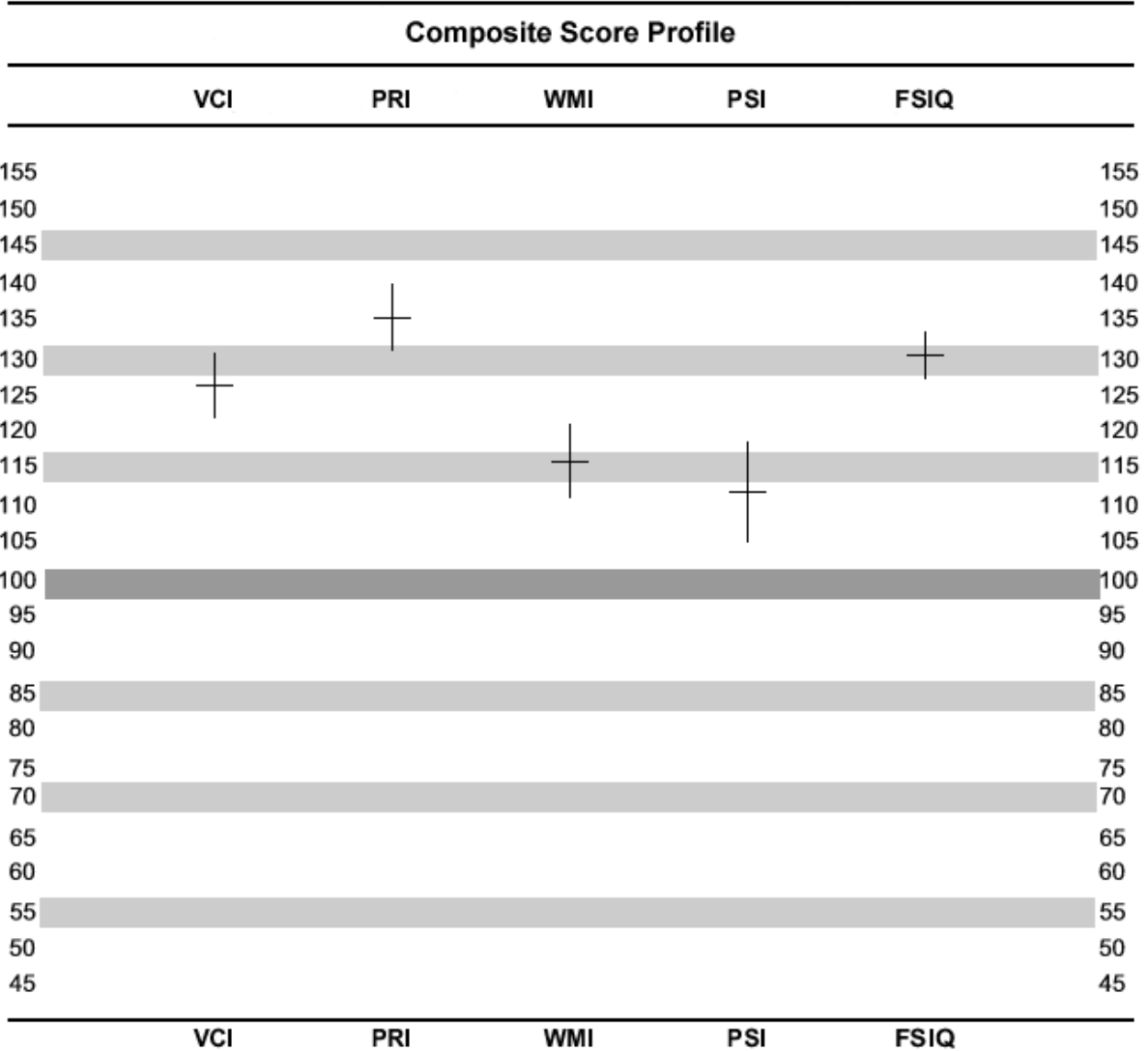
Subtests	Skills Measured	Raw Score	Scaled Score	Percentile Rank	Category
Coding	Short-term memory, ability to learn new non-verbal material, manual and/or fine-motor speed and precision, visual scanning and perception, sequential processing, attention, concentration, motivation	47	10	50	Average
Symbol Search	Short-term visual memory, visual scanning, visual discrimination, concentration, perceptual organization, planning, and general learning ability.	36	14	91	High Average
Cancellation	Visual selective attention, vigilance, and visual scanning and discrimination.	80	14	91	High Average

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WISC-IV Composite Score Profile



Vertical bar represents the Standard Error of Measurement.

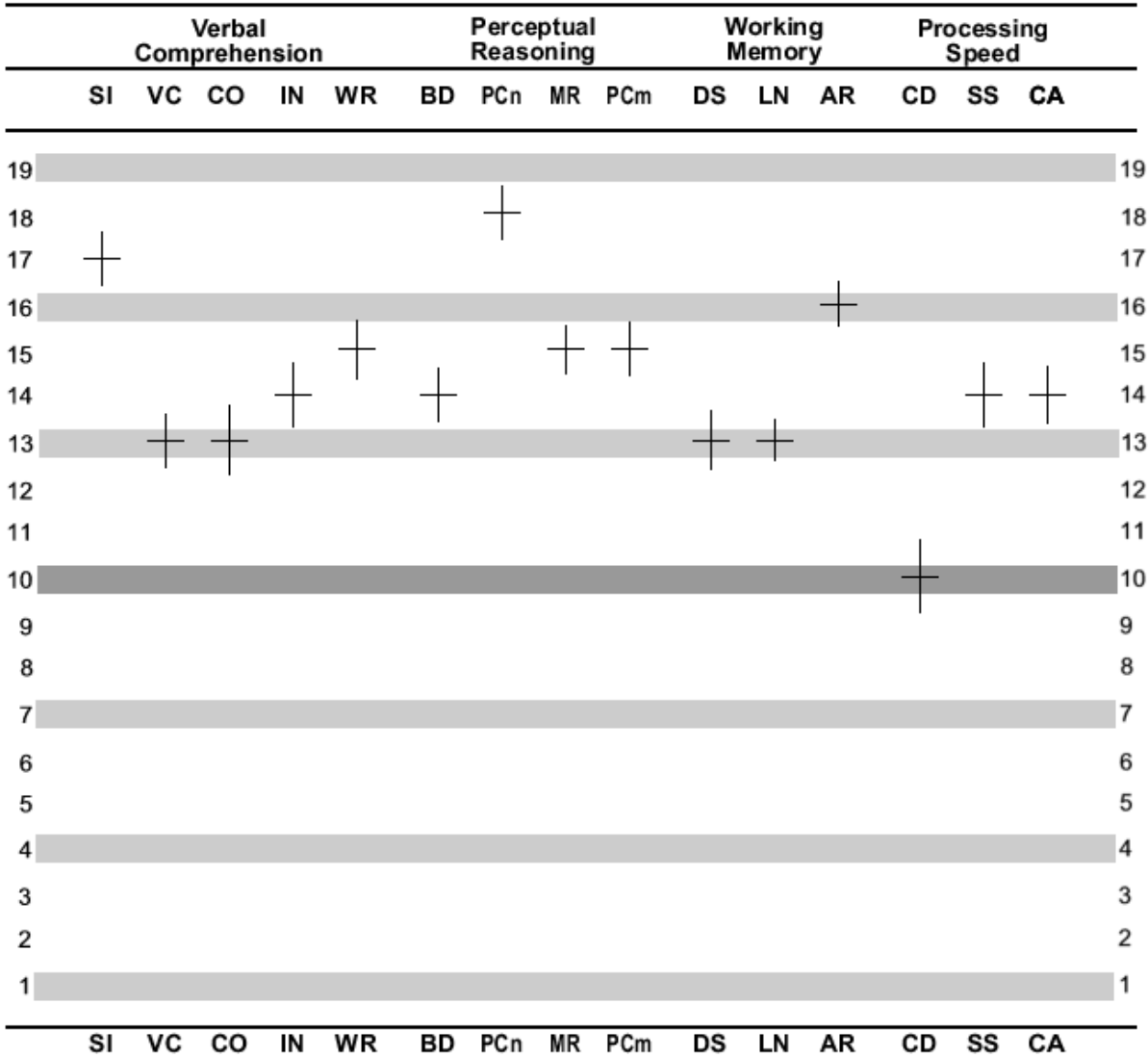
Composite	Score	SEM	Composite	Score	SEM
VCI	126	4.24	PSI	112	6.54
PRI	135	4.24	FSIQ	130	3
WMI	116	4.74			

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WISC-IV Subtest Scaled Score Profile



Vertical bar represents the Standard Error of Measurement.

Subtest	Score	SEM	Subtest	Score	SEM
Similarities (SI)	17	1.2	Picture Completion (PCm)	15	1.16
Vocabulary (VC)	13	1.16	Digit Span (DS)	13	1.31
Comprehension (CO)	13	1.53	Letter-Number Sequencing (LN)	13	0.9
Information (IN)	14	1.41	Arithmetic (AR)	16	0.95
Word Reasoning (WR)	15	1.31	Coding (CD)	10	1.59
Block Design (BD)	14	1.2	Symbol Search (SS)	14	1.37
Picture Concepts (PCn)	18	1.16	Cancellation (CA)	14	1.24
Matrix Reasoning (MR)	15	1.04			

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Composite Score Differences

	Scaled Score 1	Scaled Score 2	Diff.	Critical Value	Sig. Diff. Y/N	Base Rate
Discrepancy Comparisons						
VCI - PRI	126	135	-9	11.75	N	27%
VCI - WMI	126	116	10	12.46	N	22.9%
VCI - PSI	126	112	14	15.28	N	19.4%
PRI - WMI	135	116	19	12.46	Y	10.7%
PRI - PSI	135	112	23	15.28	Y	6.1%
WMI - PSI	116	112	4	15.83	N	40.2%

Base Rate by Overall Sample

Statistical Significance (Critical Values) at the .05 level

Subtest Score Differences

	Scaled Score 1	Scaled Score 2	Diff.	Critical Value	Sig. Diff. Y/N	Base Rate
Discrepancy Comparisons						
Digit Span - Letter-Number Sequencing	13	13	0	2.83	N	
Coding - Symbol Search	10	14	-4	3.55	Y	9.7%
Similarities - Picture Concepts	17	18	-1	3.36	N	45.1%
Digit Span - Arithmetic	13	16	-3	2.94	Y	20.2%
Letter-Number Sequencing - Arithmetic	13	16	-3	2.80	Y	17.6%
Coding - Cancellation	10	14	-4	3.58	Y	13.6%
Symbol Search - Cancellation	14	14	0	3.80	N	

Statistical Significance (Critical Values) at the .05 level

Differences between Subtest and Mean of Subtest Scores

Subtest	Subtest Scaled Score	Mean Scaled Score	Diff. from Mean	Critical Value	S/W	Base Rate
Block Design	14	14	0.00	3.01		>25%
Similarities	17	14	3.00	3.01		10-25%
Digit Span	13	14	-1.00	2.87		>25%
Picture Concepts	18	14	4.00	3.39	S	5-10%
Coding	10	14	-4.00	3.17	W	10-25%
Vocabulary	13	14	-1.00	2.70		>25%
Letter-Number Sequencing	13	14	-1.00	2.63		>25%
Matrix Reasoning	15	14	1.00	2.68		>25%
Comprehension	13	14	-1.00	3.44		>25%
Symbol Search	14	14	0.00	3.56		>25%

Overall: Mean = 14, Scatter = 8, Base Rate = 35.8%

Statistical Significance (Critical Values) at the .05 level

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Process Summary and Discrepancy Analysis

Process Score	Raw Score	Scaled Score
Digit Span Forward	9	13
Digit Span Backward	6	11
Cancellation Random	42	14
Cancellation Structured	38	12

Process Score	Raw Score	Base Rate
Longest Digit Span Forward (LDSF)	6	28.5%
Longest Digit Span Backward (LDSB)	3	76%

Process Discrepancy Comparisons

Process Score	Raw Score 1	Raw Score 2	Difference	Base Rate
LDSF - LDSB	6	3	3	31.4%

Base Rate by All Ages

Subtest/Process Score	Scaled Score 1	Scaled Score 2	Diff.	Critical Value	Sig. Diff. Y/N	Base Rate
Digit Span Forward - Digit Span Backward	13	11	2.00	3.62	N	30.4%
Cancellation Random - Structured	14	12	2.00	4.40	N	24.2%

Statistical Significance (Critical Values) at the .05 level

Interpretation of WISC-IV Results

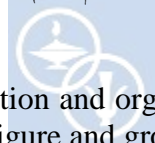
Jane was administered fifteen subtests of the Wechsler Intelligence Scale for Children – Fourth Edition (WISC-IV) from which her composite scores are derived. The Full Scale IQ (FSIQ) is derived from a combination of ten subtest scores and is considered the most representative estimate of global intellectual functioning. Jane's general cognitive ability is within the Very Superior range of intellectual functioning, as measured by the FSIQ. Her overall thinking and reasoning abilities exceed those of approximately 98% of children her age (FSIQ = 130; 95% confidence interval = 124-134). Jane may find that it is easy to keep up with her peers on most tasks that require age-appropriate thinking and reasoning abilities. She performed slightly better on nonverbal than on verbal reasoning tasks, but there is no significant meaningful difference between Jane's ability to reason with and without the use of words.

Jane's verbal reasoning abilities as measured by the Verbal Comprehension Index are in the Superior range and above those of approximately 96% of her peers (VCI = 126; 95% confidence interval = 118-131). The Verbal Comprehension Index is designed to measure verbal reasoning and concept formation. Jane's performance on the verbal subtests contributing to the VCI is somewhat variable although it is not especially unusual. Examination of Jane's performance on individual subtests provides additional information regarding her specific verbal abilities.

Jane's nonverbal reasoning abilities as measured by the Perceptual Reasoning Index are in the Very Superior range and above those of approximately 99% of her peers (PRI = 135; 95% confidence interval = 125-140). The Perceptual Reasoning Index is designed to measure fluid reasoning in the perceptual domain with tasks that

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assess nonverbal concept formation, visual perception and organization, simultaneous processing, visual-motor coordination, learning, and the ability to separate figure and ground in visual stimuli. Jane's performance on the perceptual reasoning subtests contributing to the PRI is somewhat variable, although the magnitude of this difference in performance is not unusual among children her age. Examination of Jane's performance on individual subtests provides additional information regarding her specific nonverbal abilities.

Jane's ability to sustain attention, concentrate, and exert mental control is in the High Average range. She performed better than approximately 86% of her age-mates in this area (Working Memory Index = 116; 95% confidence interval 107-122).

Jane's abilities to sustain attention, concentrate, and exert mental control are a weakness relative to her nonverbal reasoning abilities. A relative weakness in mental control may make the processing of complex information more time-consuming for Jane, draining her mental energies more quickly as compared to other children at her level of ability.

Although clearly weaker than her nonverbal reasoning abilities, Jane's ability to exert mental control is still within the High Average range and better than that of approximately 86% of her age-mates (Working Memory Index = 116; 95% confidence interval 107-122).

Jane's ability in processing simple or routine visual material without making errors is in the High Average range when compared to her peers. She performed better than approximately 79% of her peers on the processing speed tasks (Processing Speed Index = 112; 95% confidence interval 102-120). Jane's performance on the subtests that comprise the PSI is quite variable; therefore, the PSI score should be interpreted with caution. She performed much better on Symbol Search (Scaled Score = 14), which is more demanding of attention to detail and mental control, than on Coding (Scaled Score = 10), which is more demanding of fine-motor skills, short-term memory, and learning. Processing visual material quickly is an ability that Jane performs less well than her nonverbal reasoning ability. Processing speed is an indication of the rapidity with which Jane can mentally process simple or routine information without making errors. Good speed of simple information processing may free cognitive resources for the processing of more complex information, and ease new learning. Students with superior reasoning ability often tend to perform less well, although still adequately, on processing speed tasks.

Personal Strengths and Weakness

Jane's performance was significantly better on the Picture Concepts subtest than her own mean score. Further, she performed much better than most of her age-mates, thus demonstrating very strong abilities on the Picture Concepts subtest. On the Picture Concepts subtest, Jane was presented with two or three rows of easily identifiable pictures and asked to choose one picture from each row to form a group with a common characteristic. This subtest is designed to measure fluid reasoning and abstract categorical reasoning ability. The task invokes verbal concepts, but does not require verbal responses; (Picture Concepts scaled score = 18).

Jane achieved her best performance among the verbal reasoning tasks on the Similarities subtest and lowest score on the Vocabulary, and Comprehension subtests. Her performance across these areas differs significantly and suggests that these are the areas of most pronounced strength and weakness, respectively, in Jane's profile of verbal reasoning abilities. Much better than the performance of most of her age-mates, Jane's performance demonstrated very strong abilities on the Similarities subtest. Although less well developed than her other

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verbal reasoning abilities, Jane's abilities on the Comprehension, and Vocabulary subtests were still better than those of most children her age-mates. On the Similarities subtest Jane was required to respond orally to a series of word pairs by explaining how the words of each pair are alike. This subtest examines her ability to abstract meaningful concepts and relationships from verbally presented material; (Similarities scaled score = 17). The Comprehension subtest required Jane to provide oral solutions to everyday problems and to explain the underlying reasons for certain social rules or concepts. This subtest provides a general measure of verbal reasoning. In particular, this subtest assesses her comprehension of social situations and social judgment as well as her knowledge of conventional standards of social behavior; (Comprehension scaled score = 13).

Summary

Jane is a 7-year-old child who completed the WISC-IV. She was referred by her mother due to possible gifted program placement. Her general cognitive ability, as estimated by the WISC-IV, is in the Very Superior range. Jane's general verbal comprehension abilities were in the Superior range (VCI = 126), and general perceptual reasoning abilities were in the Very Superior range (PRI = 135).

Recommendations

Based on scores obtained in this assessment which included the Wechsler Intelligence Scale for Children-IV Edition, it is recommended that the student participates in an advanced/gifted placement program.

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