

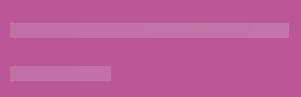
11+ Westmidlands VR, NVR & SR, English, Maths Tests

✓ 8 Full-Length papers

✓ 1,400+ Questions

✓ Detailed Answers

✓ Topic-wise Exercises



11+ Westmidlands

Paper 3 – Session 1

Instructions:

1. **Do not turn over this page** until instructed to do so.
2. This test contains four tests:
 - Test 1: **Verbal Reasoning (VR)**
 - Test 2: **Non-Verbal and Spatial Reasoning (NVR/SR)**
 - Test 3: **English**
 - Test 4: **Mathematics**
3. The front page of each test contains specific instructions. **Read them carefully** before starting.
4. Listen carefully to the instructions **read out by the invigilator**. They will guide you through the test process.
5. Check that your **name** and **date of birth** are correctly shown on the answer sheet.
6. In the answer sheet, **mark** the correct answer by **drawing a line with your pencil** through the small rectangular box beside it like this. 
7. You must make sure that you **mark your answer in the box** that has the same question number as the question you are doing in the paper.
8. If you make a mistake, rub out your mark as well as you can and mark your new answer.
9. The answer sheet will be marked by a computer.
10. You may **do any rough work** on the question paper.
11. This is a **multiple-choice test**. The complete test takes one hour, with approximately 15 minutes for each section.
12. You will need an HB pencil, an eraser and a pencil sharpener. You will not be allowed to use a ruler, a calculator, a protractor, or scrap paper.

to stop:

Do not turn the page until told to do so 

to go on:

Please go on to the next page >>>

or whether you have reached the end of the section/test.

END OF REASONING TEST

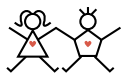
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Session 1 - Test 1

Verbal Reasoning

Instructions:

1. Do not turn over this page until instructed to do so.
2. There are **four sub-tests**
3. Each sub-test begins with a practice section, where:
 - The **first question** is solved with a detailed solution.
 - The **remaining one question** is for you to attempt.
4. The practice section is followed by the main questions.
5. Each sub-test has **five main questions**.
6. Total time for the test is **15 minutes**.
7. Work quickly and carefully through the questions.
8. If you finish early, **go back and check** your work.
9. This is a **multiple-choice test**. Each question carries **1 mark**.



Verbal Reasoning Sub-test 1 Practice Section

Reading description

In these questions, read the given information carefully and find the correct answer.

Example

You enter an empty coffee shop. Three artists sit down after you. At the first rush hour, one of the artists leaves, but seven more customers come in. At the second rush hour some more customers arrive and five leave. When the shop closes for the day, there are twelve people including yourself in the coffee shop.

How many customers arrived during the second rush hour?

- A** 7 **B** 8 **C** 9 **D** 10 **E** 12

The answer is 7. Start: $1 + 3 = 4$. After 1st rush: $4 - 1 + 7 = 10$. At close: $10 + A - 5 = 12$. So, $A - 5 = 12 - 10 = 2$. $A = 2 + 5 = 7$. Thus, the correct answer is 7.

Now try this practice question and mark the correct option on the answer sheet.

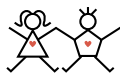
P1

Mason, Michael, Miranda, Mitchell, and Morgan all sit alphabetically in a row from left to right.

Who sits in the middle?

- A** Mason **B** Michael **C** Miranda **D** Mitchell **E** Morgan

End of Verbal Reasoning Sub-test 1 Practice Section.



Verbal Reasoning Sub-test 1

*This section is **marked**.*

In these questions, read the given information carefully and find the correct answer and mark the correct option on the answer sheet.

1

Harry has twelve chocolates. If William gives Harry four chocolates, Harry will now have half as many chocolates as William has left.

How many chocolates did William start with?

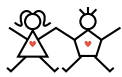
- A** 20 **B** 24 **C** 28 **D** 32 **E** 36

2

James, Oliver and Emma together have 120 marbles. James and Oliver together have 75 marbles. Emma and Oliver together have 85 marbles.

Who has the most marbles?

- A** James
B Oliver
C Emma
D James and Oliver have the same number
E Oliver and Emma have the same number



3

The month after next month is August.

What month was it three months before last month?

- A** January **B** February **C** March
D December **E** November

4

Charlotte's brother William is four years younger than Charlotte was last year and next year Charlotte will be 32.

How old will William be in three years?

- A** 29 **B** 30 **C** 31 **D** 32 **E** 33

5

A group of friends are comparing their heights. Alex is taller than Ben. Chris is taller than Alex. David is taller than Chris.

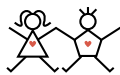
Using this information, determine which of the following statements **MUST** be true.

If these statements are true, only ONE of the statements below MUST be TRUE. Which one?

- A** Ben is the tallest.
B Chris is shorter than Ben.
C Alex is taller than David.
D Ben is shorter than Chris.
E David is shorter than Alex.

End of Verbal Reasoning Sub-test 1





Verbal Reasoning Sub-test 2 Practice Section

Codes - Words to Codes

In these questions, each word is written in a code. Find the pattern in the given code and apply it to find the correct code for the new word.

Example

If the code for **SUN** is **RSK**, what is the code for **MAN**?

- A** LDL **B** NXP **C** LYK **D** DLL **E** MDL

*The answer is **LYK**. In the code for $SUN \rightarrow RSK$, each letter moves backward in the alphabet: $S \rightarrow R$ (-1), $U \rightarrow S$ (-2), and $N \rightarrow K$ (-3). Using the same pattern for MAN , $M \rightarrow L$ (-1), $A \rightarrow Y$ (-2), and $N \rightarrow K$ (-3). Thus, the correct code for MAN is **LYK**.*

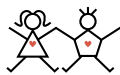
Now try this practice question and mark the correct option on the answer sheet.

P2

If the code for **BRAT** is **FOCS**, what is the code for **CROP**?

- A** GOPO **B** GOQO **C** DSPQ **D** GLPN **E** FQPL

End of Verbal Reasoning Sub-test 2 Practice Section.



Verbal Reasoning Sub-test 2

*This section is **marked**.*

In these questions, each word is written in a code. Find the pattern in the given code and apply it to find the correct code for the new word and mark the correct option on the answer sheet.

6 If the code for **BED** is **CFE**, What is the code for **ARM**?

- A** BSN **B** BSO **C** CTN **D** CSM **E** ATS

7 If the code for **TOP** is **SON**, what is the code for **BOX**?

- A** AOV **B** BOW **C** CPX **D** AMW **E** BMV

8 If the code for **FISH** is **HFUE**, what is the code for **CLAP**?

- A** EIBO **B** DMBP **C** ELAP **D** EICM **E** FOCP

9 If the code for **GRAB** is **ESYC**, what is the code for **LOCK**?

- A** JPCM **B** JGFM **C** JPAL **D** KHCL **E** JECM



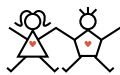
10

If the code for **BRIDE** is **CTLHJ**, what is the code for **HOUSE**?

- A** IQYWJ **B** JRYVK **C** HPZVI **D** IQXWJ **E** JQXZK

End of Verbal Reasoning Sub-test 2





Verbal Reasoning Sub-test 3 Practice Section

Hidden Word

In these questions, a four-letter word is hidden at the end of one word and the beginning of the next word. Find the pair of words that contains the hidden word.

Example

They put their on display for everyone to see

- A** put their **B** their on **C** on display
D display for **E** everyone to

*The answer is **their on**. The hidden four-letter word is 'iron', formed by taking the last two letters of their and the first two letters of on. Thus, the pair of words that contains the hidden word is **their on**.*

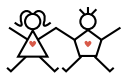
Now try this practice question and mark the correct option on the answer sheet.

P3

The main topic was discussed at the meeting.

- A** The main **B** main topic **C** topic was
D was discussed **E** at the

End of Verbal Reasoning Sub-test 3 Practice Section.



Verbal Reasoning Sub-test 3

*This section is **marked**.*

In these questions, a four-letter word is hidden at the end of one word and the beginning of the next word. Find the pair of words that contains the hidden word and mark the correct answer on the answer sheet.

- 11** She was home alone last night.
- A** was home **B** home alone **C** alone last
D last night **E** she was

- 12** His cape allows fast movement during rescue missions.
- A** His cape **B** fast movement **C** allows fast
D cape allows **E** movement during

- 13** The current state ambition is to scale the summit.
- A** The current **B** current state **C** state ambition
D ambition is **E** to scale



14

The sofa cement was very hard.

- A** The sofa **B** sofa cement **C** cement was
D was very **E** very hard

15

Please provide all the details promptly.

- A** Please provide **B** details promptly **C** all the
D the details **E** provide all

End of Verbal Reasoning Sub-test 3





Verbal Reasoning Sub-test 4 Practice Section

Jumbled Up Sentences

In these questions, the given words can be rearranged to form a meaningful sentence. Label each word with a number to indicate its correct position, starting with 1 for the first word. Only one of the five answer choices correctly represents this order.

Example

dog ran quickly the small

- A** 4, 5, 1, 2, 3 **B** 5, 1, 2, 3, 4 **C** 4, 1, 2, 3, 5
D 1, 2, 3, 4, 5 **E** 4, 5, 2, 1, 3

*The answer is **4, 5, 1, 2, 3**. The correct sentence formed by rearranging the words is: **The small dog ran quickly**. The numbers represent the correct order of words in the sentence, where **4 → The**, **5 → small**, **1 → dog**, **2 → ran**, and **3 → quickly**. By checking all answer choices, only **4, 5, 1, 2, 3** follows this order correctly, making it the correct answer.*

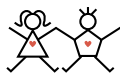
Now try this practice question and mark the correct option on the answer sheet.

P4

praised students the teacher the

- A** 3, 1, 4, 5, 2 **B** 3, 5, 2, 1, 4 **C** 1, 3, 4, 5, 2
D 1, 4, 3, 5, 2 **E** 3, 4, 1, 5, 2

End of Verbal Reasoning Subtest 4 Practice Section.



Verbal Reasoning Sub-test 4

This section is **marked**.

In these questions, the given words can be rearranged to form a meaningful sentence. Label each word with a number to indicate its correct position, starting with 1 for the first word. Only one of the five answer choices correctly represents this order. Mark the correct option on the answer sheet.

16

read a book I daily

A 4, 1, 2, 3, 5

B 1, 2, 3, 4, 5

C 4, 2, 3, 1, 5

D 1, 4, 2, 3, 5

E 4, 1, 3, 2, 5

17

quietly dog the sleeping is

A 1, 2, 3, 4, 5

B 3, 2, 4, 5, 1

C 2, 3, 5, 4, 1

D 3, 2, 5, 4, 1

E 2, 4, 3, 5, 1

18

quickly finished homework my I

A 5, 4, 2, 3, 1

B 2, 5, 4, 3, 1

C 5, 2, 4, 3, 1

D 1, 2, 3, 4, 5

E 5, 2, 3, 4, 1



19

blue the sky is today

A 4, 2, 1, 3, 5

B 2, 4, 1, 3, 5

C 3, 1, 5, 2, 4

D 2, 1, 5, 3, 4

E 2, 3, 4, 1, 5

20

disappeared into the mist they

A 1, 2, 3, 4, 5

B 5, 1, 2, 3, 4

C 5, 2, 1, 3, 4

D 5, 1, 3, 2, 4

E 1, 5, 2, 3, 4

End of Verbal Reasoning Sub-test 4

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Session 1 – Test 2

Non-Verbal & Spatial Reasoning

Instructions:

1. **Do not turn over this page** until instructed to do so.
2. There are **three sub-tests**.
3. Each sub-test begins with a **practice section**, where:
 - The **first question** is solved with a detailed solution.
 - The remaining **one question** is for you to attempt.
4. The practice section is followed by the main questions.
5. Each sub-test has **six main questions**.
6. Total time for the test is **15 minutes**.
7. Work quickly and carefully through the questions.
8. If you finish early, **go back and check** your work.
9. This is a **multiple-choice test**. Each question carries **1 mark**.

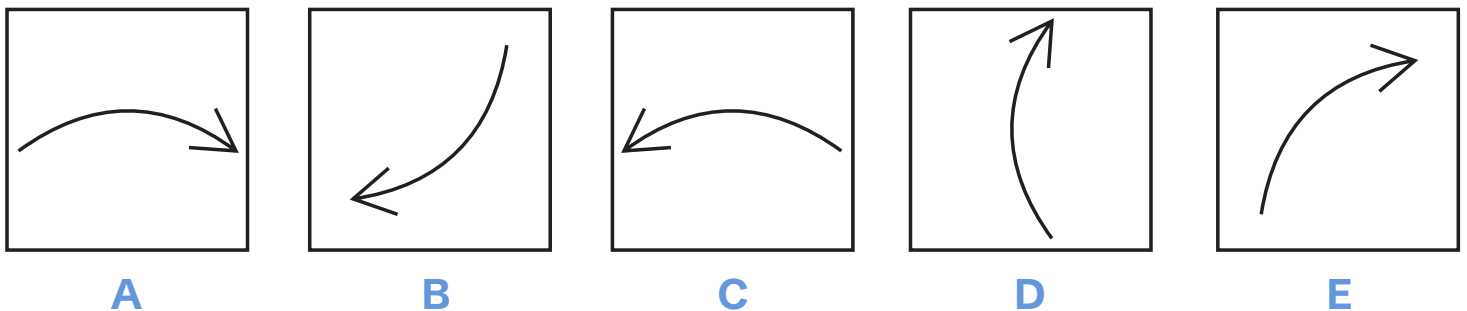


Non-Verbal Reasoning Sub-test 1 Practice Section

Odd One Out

In each of the rows below there are five figures. Find the figure in each row that is most unlike the other four.

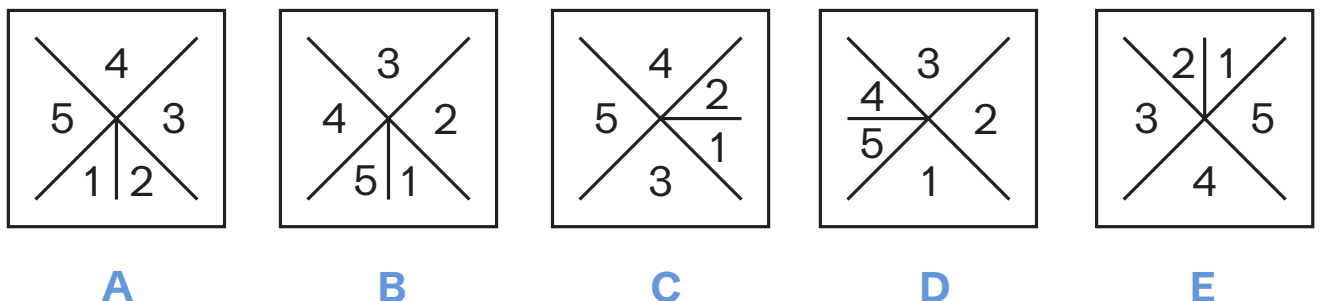
Example



*The correct answer is **C**. In all other figures, the arrow indicates clockwise direction motion.*

Now try this practice question and mark the correct option on the answer sheet.

P1



End of the Non-Verbal Reasoning Sub-test 1 Practice Section

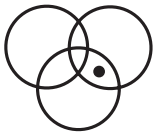


Non-Verbal Reasoning Sub-test 1

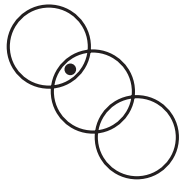
This section is **marked**.

In each of the rows below there are five figures. Find the figure in each row that is most unlike the other four and mark its letter on the answer sheet.

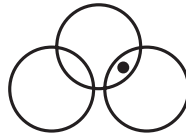
1



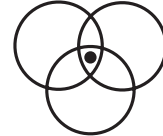
A



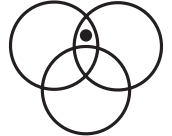
B



C

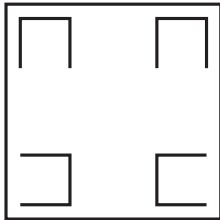


D

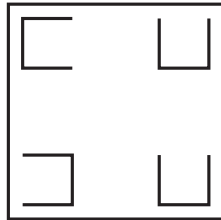


E

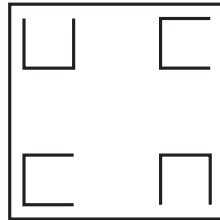
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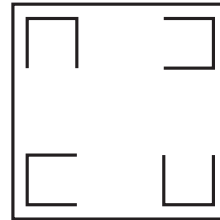
A



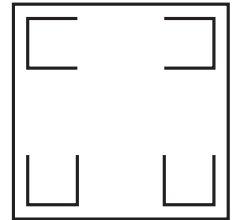
B



C

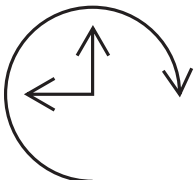


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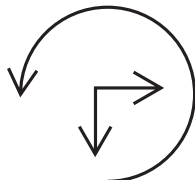


E

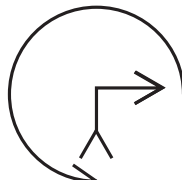
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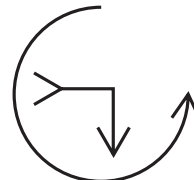
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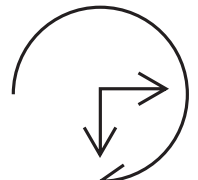
B



C



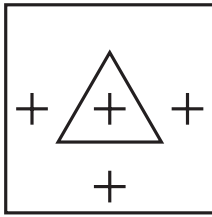
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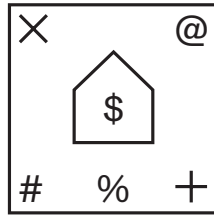
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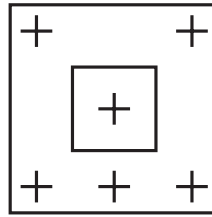
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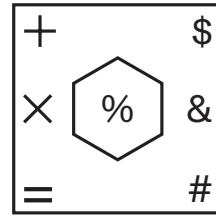
A



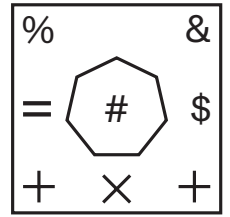
B



C

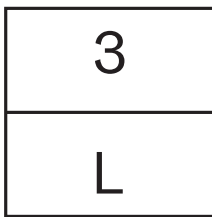


D

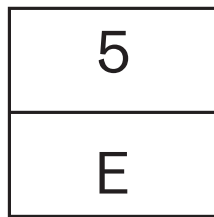


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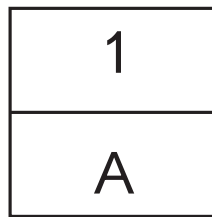
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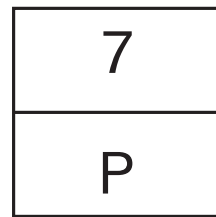
A



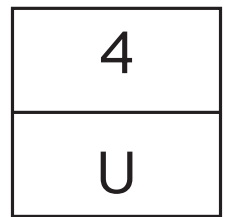
B



C

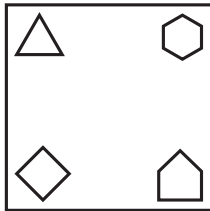


D

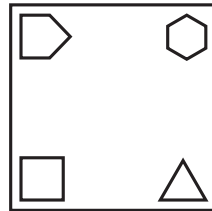


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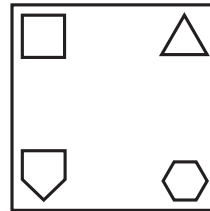
6



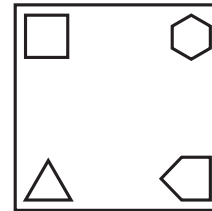
A



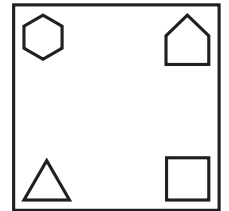
B



C



D



E

End of Non-Verbal Reasoning Sub-test 1



Non-Verbal Reasoning Sub-test 2 Practice Section

Codes

On the left, some pictures have code letters that describe them. Work out what each letter means. A new picture is shown on the right with five possible codes. Choose the correct code for the new picture.

Example

	F		L		M		N
	T		S		T		S

F	F	L	N	M
T	S	T	T	S

A B C D E

The correct answer is **B**. The coding system uses letters where each letter represents a specific element: F indicates triangle, L indicates circle, M indicates square, N indicates pentagon, T indicates two similar shapes, and S indicates two different shapes. The pattern shows a sequence where the missing cell should contain a triangle in the upper portion, coded as part of the matrix structure. Option **B** follows the pattern.

Now try this practice question and mark the correct option on the answer sheet.

P2

	C		D		F		C
	T		A		B		A

D	D	F	C	D
T	A	T	B	B

A B C D E

End of the Non-Verbal Reasoning Sub-test 2 Practice Section

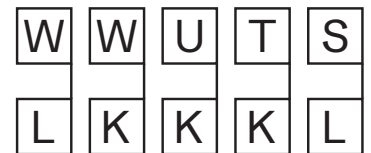
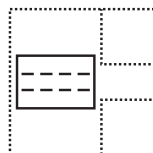
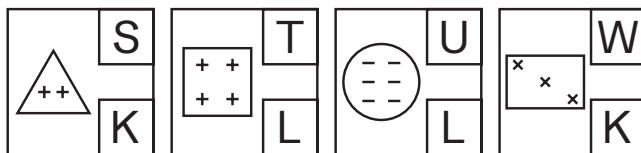


Non-Verbal Reasoning Sub-test 2

This section is **marked**.

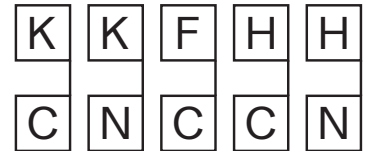
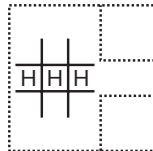
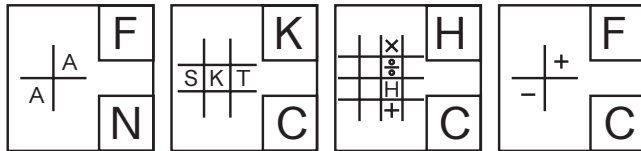
On the left, some pictures have code letters that describe them. Work out what each letter means. A new picture is shown on the right with five possible codes. Choose the correct code for the new picture and mark its letter on your answer sheet.

7



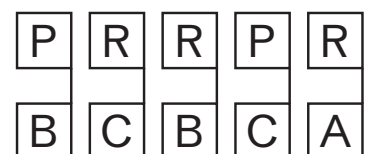
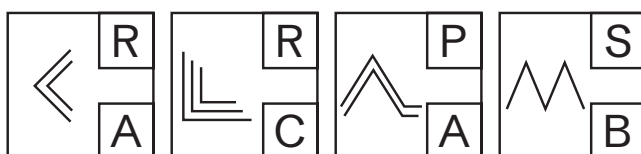
A B C D E

8



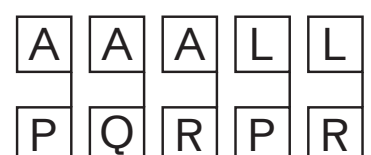
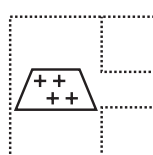
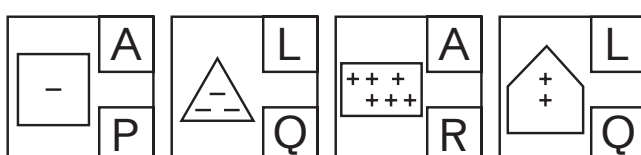
A B C D E

9



A B C D E

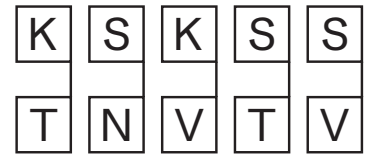
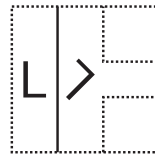
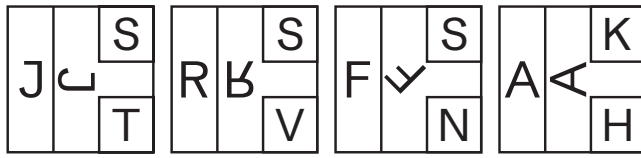
10



A B C D E

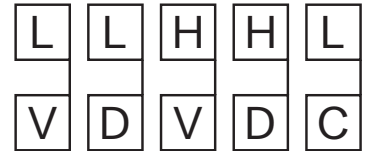
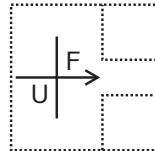
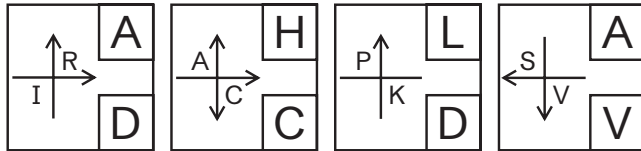


11



A B C D E

12



A B C D E

End of Non-Verbal Reasoning Sub-test 2

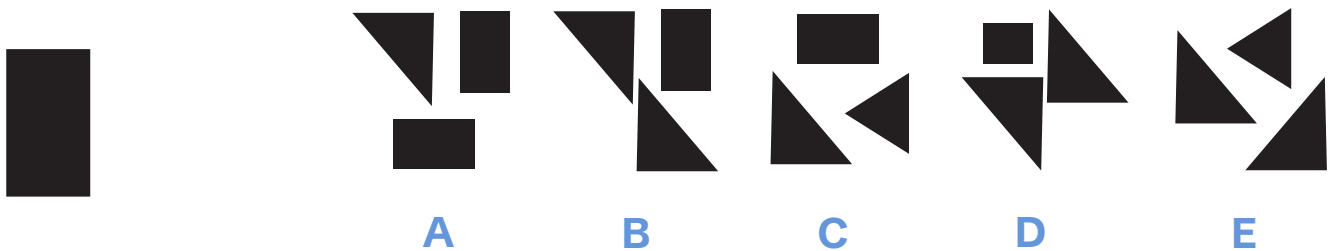


Spatial Reasoning Sub-test 3 Practice Section

2D and 3D Shape Combining

A solid shape is shown on the left. On the right, there are five sets of smaller shapes. One of these sets can be combined to form the given shape. Identify the correct set of shapes.

Example

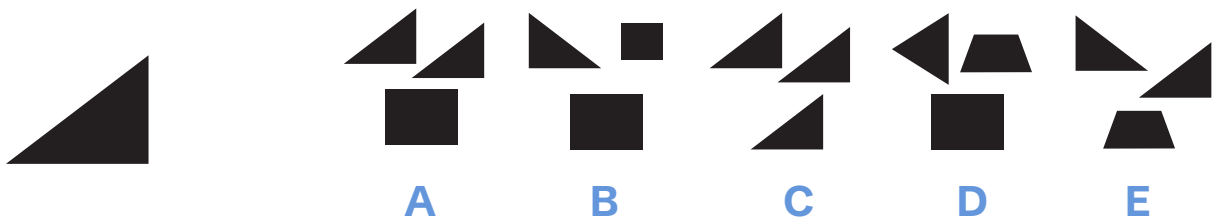


*The correct answer is **B**. The puzzle requires identifying which set of smaller shapes can be put together without gaps or overlaps to recreate the original solid rectangle. Option **B** contains pieces that, when properly arranged and positioned together, perfectly rebuild the target shape shown on the left. **B**.*



Now try this practice question and mark the correct option on the answer sheet.

P3



End of the Spatial Reasoning Sub-test - 3 Practice Section

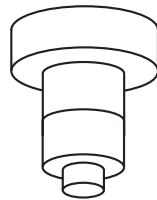
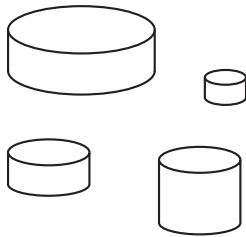


Spatial Reasoning Sub-test 3

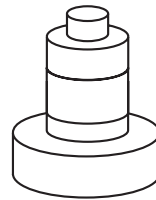
This section is **marked**.

A solid shape is shown on the left. On the right, there are five sets of smaller shapes. One of these sets can be combined to form the given shape. Identify the correct set of shapes and mark its letter on your answer sheet.

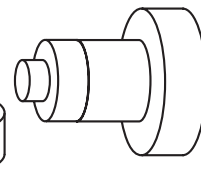
13



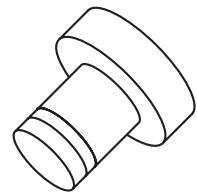
A



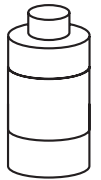
B



C



D



E

14



A



B



C



D



E

15



A



B



C



D



E



16



A



B



C

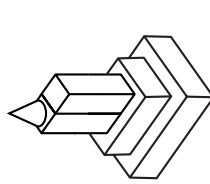
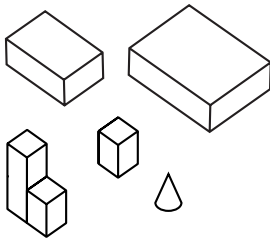


D

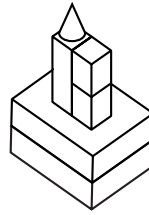


E

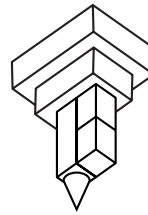
17



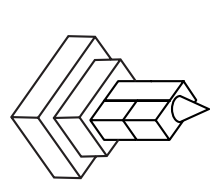
A



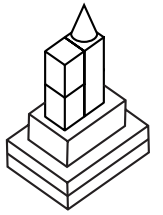
B



C

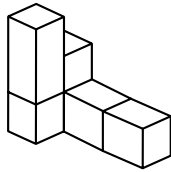
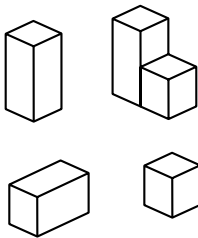


D

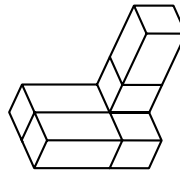


E

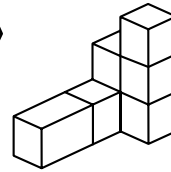
18



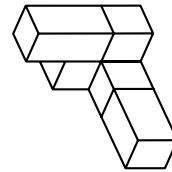
A



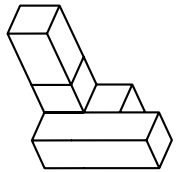
B



C



D



E

End of Spatial Reasoning Sub-test 3

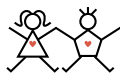
11+ West Midlands

Session 1 - Test 3

English

Instructions:

1. Do not turn over this page until instructed to do so.
2. This is a Reading Comprehension test.
3. The test begins with a practice section.
4. The practice section contains one passage with two practice questions.
5. The practice section is followed by the 10 main questions.
6. Total time for the test is 15 minutes.
7. Work quickly and carefully through the questions.
8. If you finish early, go back and check your work.
9. This is a multiple-choice test. Each question carries 1 mark.



English - Practice Section

Reading Comprehension

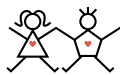
Read this passage carefully, then answer the questions that follow.

What is a bushfire?

1. Bushfires are fires that burn through areas of bushland and areas of vegetation, like woodland, scrubland, grassland or savannahs. These fires are unpredictable and difficult to control.

5. These fires are particularly common in areas that experience hot, dry weather, like Australia, Greece, Africa and parts of the USA, like California. There are lots of possible bushfire causes. They can start naturally, when lightning strikes and ignites dry plants and trees, like the golden wattle tree. But they can also be caused by people, for example, by someone not extinguishing their campfire properly. Sadly, sometimes fires are started by someone deliberately.

10. Climate change doesn't start bushfires, but it does cause them to become larger and more ferocious. That's because our warming planet is experiencing more intense periods of drought, drying out the vegetation that fuels the fires. All that's needed is a spark.



*Please answer these questions. (Look at the passage again if you need to.) You should choose the **best** answer and mark its letter on your answer sheet.*

P1 What does the word “ferocious” (line 11) mean in the context of the passage about bushfires?

- A** Intense and destructive
- B** Fast-moving
- C** Widespread
- D** Unpredictable
- E** Smoky

P2 Which of the following statements about the relationship between climate change and bushfires is supported by the text? (lines 10-13)

- A** Climate change is the primary cause of bushfires
- B** Climate change causes bushfires to become larger and more intense
- C** Climate change has no effect on bushfires
- D** Climate change only affects bushfires in Australia
- E** Climate change prevents bushfires from being controlled

This is the end of the English practice section.



English

*This section is **marked**.*

Reading Comprehension

Read this passage carefully, then answer the questions that follow.

Red Arrows: All about the Royal Air Force's famous flying squad

In this passage, we learn about the upbringing and family life of our main character, Tom.

1. The Red Arrows are the UK Royal Air Force's team of skilled display pilots.

They are famous for flying in elaborate formations, often releasing plumes of colourful vapour in red, white and blue - the colours of the Union Flag.

5. In May, they performed a flypast at the 80th VE Day anniversary celebrations over The Mall and Buckingham Palace.

The flying display team demonstrates to the public how skilled RAF pilots are, showing off the team's speed and agility. During displays the Red Arrows fly in impressive shapes and formations, extremely close together, and are known for releasing colourful vapour as they fly in the sky.

10. There are currently nine aircraft that make up the Red Arrows team, with additional aircraft for support. The nine pilots who fly the planes need at least 1,500 hours of experience in the RAF, and must be considered exceptional in their role. Back in 1965, when the team was first formed, there were only seven aircraft. The team then scaled up to a nine display aircraft in 1968.

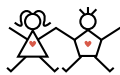
15. It's not just pilots who make up the Red Arrows though, there is also a whole



support team known as the “Blues”. The Blues are made up of 120 people, including engineers and support staff who ensure the planes keep working and the team is run successfully. The team are based at RAF Waddington in Lincolnshire.

20. Back in 1964 the RAF’s existing unofficial display teams merged into one team - The Red Arrows. “Red Arrows” is a combination of the names of two other teams at the time - the Black Arrows and the Red Pelicans. Their first official display as a team was in 1965, at the RAF satellite station in Little Rissington on May 6. Since their formation, the Red Arrows have gained recognition and become renowned worldwide. They are considered to be one of the best aerobatic display teams in the world.
- 25.

The Red Arrows perform flypasts and displays at many air shows and events in the UK throughout the year. They also perform abroad and go on international tours. According to the RAF, by the beginning of 2024 the Red Arrows had performed in 57 countries since 1965.



*Please answer these questions. (Look at the passage again if you need to.)
You should choose the **best** answer and mark its letter on your answer sheet.*

1

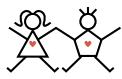
How many people make up the support team for the Red Arrows?

- A 9
- B 57
- C 120
- D 1500
- E 145

2

What does the term “flypast” (line 4) refer to?

- A A training exercise for pilots
- B A ceremonial flight over a specific location
- C A formation used during air shows
- D A method of aerial photography
- E A competition between RAF teams



3

What does “aerobatic” (line 24) mean in relation to the Red Arrows?

- A** Involving comedy routines in the air
- B** Flying at extremely high altitudes
- C** Performing complex manoeuvres and stunts in the air
- D** Flying at high speeds
- E** Using special aircraft designed for long distances

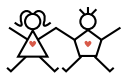
4

Which statements about the Red Arrows are supported by the text?

Choose TWO.

- 1 The team was formed in 1964
- 2 The team has always had nine aircraft
- 3 The team originated from merging earlier display teams
- 4 The team only performs in the UK
- 5 The team is based in London

- A** 1 and 3
- B** 1 and 5
- C** 2 and 4
- D** 3 and 4
- E** 4 and 5



5

According to the passage, when did the Red Arrows perform their first official display?

- A 1964
- B 6th May 1965
- C 1968
- D At the 80th VE Day anniversary celebrations
- E At RAF Waddington

6

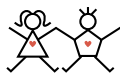
What is the primary purpose of this passage?

- A To persuade readers to join the Royal Air Force
- B To criticise the expense of maintaining display teams
- C To inform readers about the history and activities of the Red Arrows
- D To compare the Red Arrows with other aerial display teams
- E To explain the technical aspects of formation flying

7

What can be inferred about the qualification process for Red Arrows pilots?

- A It is open to any pilot with basic training
- B It is highly competitive and selective
- C It requires international experience
- D It focuses primarily on academic qualifications
- E It prioritises combat experience over flying skills



8

How does the passage characterise the Red Arrows team as a whole?

- A** As primarily a promotional tool for RAF recruitment
- B** As a training ground for combat pilots
- C** As a ceremonial unit with a limited practical purpose
- D** As a temporary formation assembled for special events
- E** As an elite, prestigious team with global recognition

9

In the sentence “*The Red Arrows perform flypasts and displays at many air shows and events in the UK throughout the year*” (lines 26-27), what part of speech is “throughout”?

- A** Noun
- B** Verb
- C** Adjective
- D** Preposition
- E** Conjunction

10

What colours of vapour do the Red Arrows release during their displays?

- A** Red only
- B** Blue and white
- C** Red, white and blue
- D** Rainbow colours
- E** Black and red

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Session 1 - Test 4

Maths

Instructions:

1. Do not turn over this page until instructed to do so.
2. The test begins with a practice section.
3. The practice section includes 3 questions.
4. The practice section is followed by the main questions.
5. Total time for the test is **15 minutes**.
6. Work quickly and carefully through the questions.
7. If you finish early, go back and check your work.
8. This is a **multiple-choice test**. Each question carries **1 mark**.

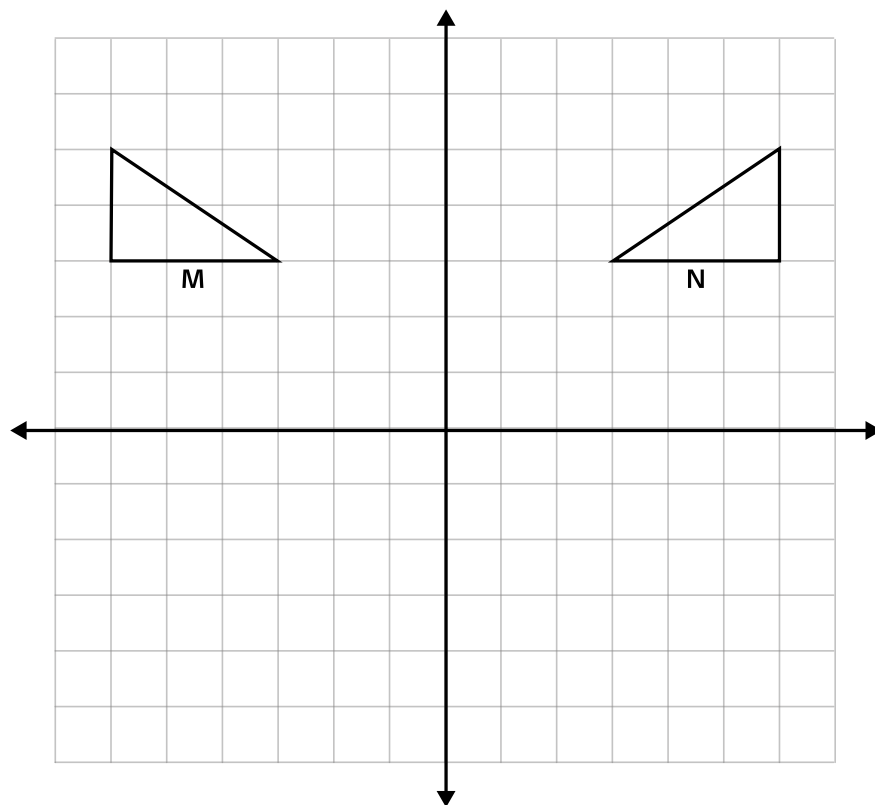


Maths: Practice Section (5 mins)

Try practice questions below. Work out the correct answer and mark it on the answer sheet.

P1

Shape M is transformed into shape N.

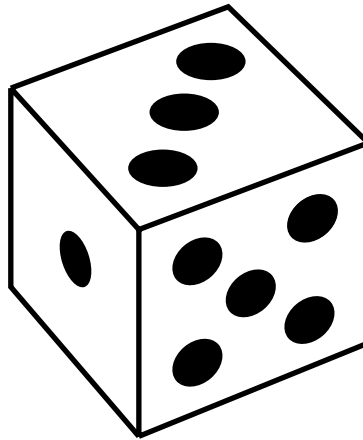


What transformation is applied to do this?

- A** Reflection across the vertical line
- B** Rotation of 180° around the origin
- C** Reflection across the horizontal line
- D** Rotation of 90° clockwise around the origin
- E** Reflection along the vertical line, and then the horizontal line



P2 A standard six-sided dice has the numbers 1 to 6 on its faces.



What is the probability of rolling an even number greater than 2?

A $\frac{1}{2}$

B $\frac{1}{3}$

C $\frac{1}{4}$

D $\frac{1}{6}$

E $\frac{3}{4}$

P3 Calculate: $(25 + 5) \div (20 - 10) =$

A 3

B 4

C 2

D 5

E 6

This is the end of the Maths practice section.





Maths

*This section is **marked**.*

1

m and n are whole numbers. m is 120 less than n. The following statement is also true:

$$m + n = 840$$

Calculate the numbers m and n.

A $m = 360, n = 460$

B $m = 480, n = 360$

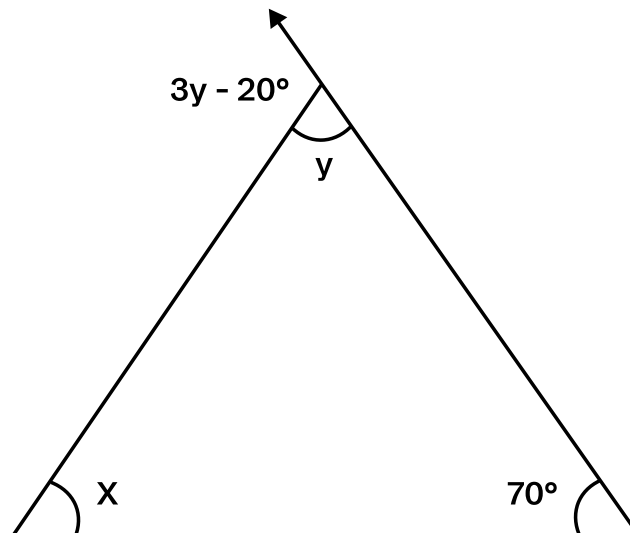
C $m = 360, n = 480$

D $m = 340, n = 500$

E $m = 370, n = 470$

2

Calculate the values of x and y in the given diagram?



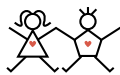
A $x = 40^\circ$ and $y = 50^\circ$

B $x = 50^\circ$ and $y = 40^\circ$

C $x = 60^\circ$ and $y = 30^\circ$

D $x = 50^\circ$ and $y = 60^\circ$

E $x = 60^\circ$ and $y = 50^\circ$



3

The scale of a map is given by 1 : 15000. On the map, a square garden has sides measuring 6 mm each.

Find the real area of the garden.

A 8100 m² **B** 7500 m² **C** 8100 cm² **D** 9000 m² **E** 7200 cm²

4

Mia has some coloured pencils in a box. There are 12 red pencils, 6 blue pencils, and the rest are green. She picks one pencil at random from the box. The probability of picking a green pencil is one-third.

How many pencils are in the box?

A 38 **B** 24 **C** 30 **D** 27 **E** 42

5

What is the greatest number that divides exactly into 60, 84, and 108?

A 12 **B** 6 **C** 21 **D** 4 **E** 10

6

$$Q = 6a - 4b^2$$

Work out the value of Q when a = 5 and b = 3

A -6 **B** -31 **C** -21 **D** -18 **E** -3



7

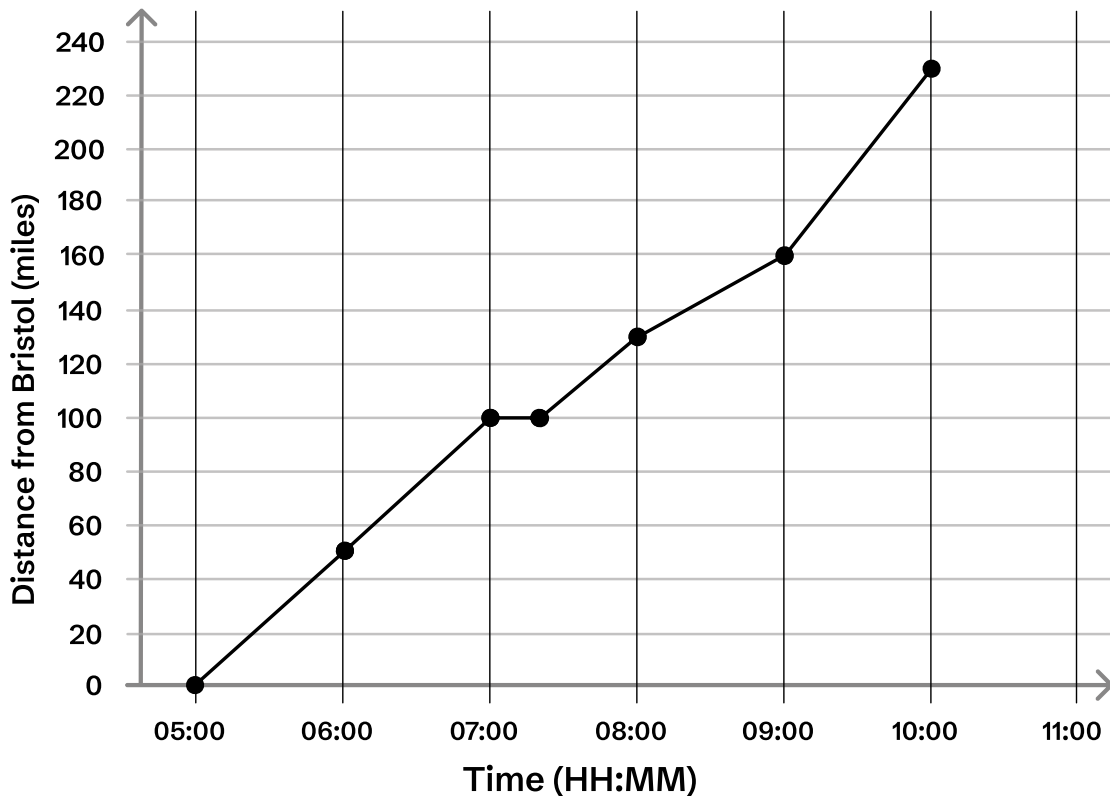
The side of a square measures 10 cm. A regular pentagon has the same perimeter.

How long are the sides of the regular pentagon?

- A** 8 cm **B** 7 cm **C** 9 cm **D** 6 cm **E** 10 cm

8

A train travels from Bristol to Cardiff, stops for 20 minutes, and then continues its journey to Swansea.



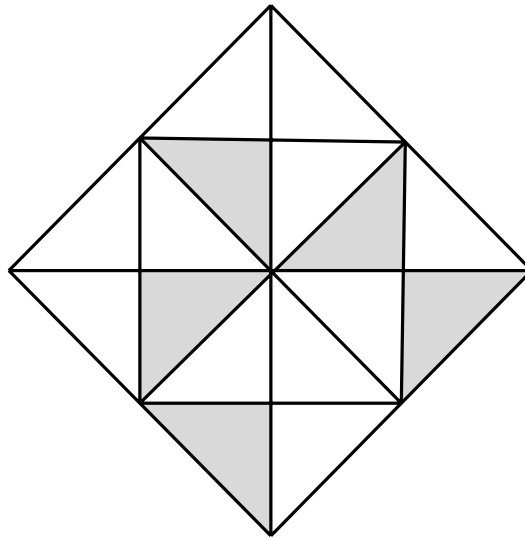
How far is Swansea from Cardiff?

- A** 150 miles **B** 180 miles **C** 130 miles
D 160 miles **E** 140 miles



9

What fraction of the shape is shaded?



A $\frac{7}{16}$

B $\frac{5}{16}$

C $\frac{1}{4}$

D $\frac{1}{3}$

E $\frac{3}{16}$

10

Jack hired a bicycle. It costs £15 plus £3 per hour. If Jack paid £36,

He hired the bicycle for how many hours?

A 5

B 6

C 7

D 8

E 9



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