

Higher Ability Selection Test

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WHAT IS HAST?

The Higher Ability Selection Test is used to identify academically gifted students for selection into gifted and talented programs at the secondary school level. The test measures higher-order thinking skills and academic potential rather than what a student has achieved in the classroom.

HAST testing is available at the junior secondary, middle secondary and senior secondary levels. The sample questions in this booklet are similar in style and content to those found at the junior secondary level. At this level students will usually be in their last year of primary school or first year of secondary school. Students sitting the middle and senior secondary levels may also find this booklet useful in providing an indication of the style and format of the questions.

WHAT TESTS ARE INCLUDED?

There are four tests in total. Depending on the school where you are enrolled, you may be required to undertake all four tests or only some of them.

Reading Comprehension

This is a multiple-choice test that measures how well you comprehend and interpret ideas in language. You will read through a range of texts including prose, poetry, diagrams, tables and maps, and then answer questions that will assess your understanding of them. You may be required to identify the main ideas or themes in a piece, identify different interpretations of the text, evaluate points of view about characters or events, or identify logical relations in factual information.

Mathematical Reasoning

This is a multiple-choice test that measures mathematical ability and quantitative reasoning skills. You will be required to comprehend, interpret and analyse mathematical information at the junior secondary level and mathematics and science at the middle and senior secondary levels. The skills assessed across all levels include comprehending and interpreting, inferring, predicting and drawing conclusions, reasoning, and problem solving. At the junior secondary level tasks are presented in real-life situations using mathematical concepts such as number, pattern, space, time and measurement. In some instances you will need to apply logical and strategic thinking to work through the questions in the test.

Abstract Reasoning

This is a multiple-choice test that measures your ability to analyse information and solve problems using non-verbal reasoning. You will be required to identify a pattern shown in a sequence of diagrams. The pattern may need to be continued or completed, or the diagrams may need to be re-arranged to identify the middle object in a sequence. The diagrams completing the pattern may have a number of elements including size, shape, shading and

orientation, that need to be considered when deciphering the pattern.

Information is presented in picture format using squares, triangles, lines and graphical images.

Written Expression

This is an extended writing task that assesses your ability to express your thoughts and feelings in written English. Assessment is based on thought and content, structure and organisation, expression, style, and the mechanics of your written response. The test also provides a measure of logical and creative thinking skills in addition to language competency.

Writing tasks provide an opportunity to write for different purposes and audiences. You may be given a discursive task that offers an issue or topic and prompts you to discuss the ideas that may arise. You may alternatively be given a creative task that prompts narrative or personal writing.

HOW SHOULD I USE THIS BOOKLET?

The HAST is designed to measure natural academic ability rather than academic achievement. Reading through this booklet provides an opportunity to reflect on the types of skills required of you but it is not designed to teach you these skills. These sorts of skills are developed over a long period of time or they are skills that are innate and natural to you.

This booklet contains examples of questions and does not reflect a real test. To familiarise yourself with the HAST you could work through the questions as if you were sitting a timed test or you could read through each question and check the answers as you go. The answers to the questions are at the back of the booklet. Work through each question carefully and at a steady pace, and if you find one question too difficult leave it and move on to the next one. You may have time to come back to this question later. As a rough guide allow between 1 and 2 minutes per question.

There are also some examples of the Written Expression test. It may be useful to test your writing skills using these prompts. In the real test you will be given 25 minutes to plan and complete your writing task.

For further information go to
<https://www.acer.org/hast-secondary>

PART 1

Reading Comprehension

Questions 1 – 7

The following table contains information about two species of camel in existence today: the Arabian and the Bactrian.

Type of camel	Individual properties	Area where found	Properties in common
Arabian camel (Dromedary)	One hump Thick, broad sole pads on feet Thick padding on joints of the legs and chest Nostrils can be closed against flying dust Two rows of long eyelashes to shield eyes Used as a saddle animal Can cover more than 160 kilometres in a day Has ability to bite off and chew thorny desert plants	North-western India Afghanistan Arabian Peninsula Somalia Australia	Endurance Strength Humps are stores of flesh and fat; absorbed as nutrition when food is scarce Can exist without water for several days Flesh and milk of the camel used as food Camel hide used for leather
Bactrian camel	Two humps Hard, cloven feet Long, fine wool Smaller, heavier build than Arabian camels Can carry loads of up to 454 kilograms Travels at 4 km/h and can travel up to 45 kilometres in a day Can withstand extreme temperatures	Central Asia South-western Mongolia North-western China	The hair, shed every summer, is made into cord, fine paint brushes and cloth Can drink as much as 100 litres of water in 10 minutes

- 1 The Bactrian camel
- A can be used to carry heavy loads.
 - B can be used as a source of food.
 - C can cover very long distances in a day.
 - D can have the same build as the Arabian camel.
- 2 Which one of the following statements is true?
- A The two types of camel are physically the same.
 - B The two types of camel can be found in the same places.
 - C The two types of camel have adapted to their different environments.
 - D The two types of camel have adapted differently to the same environment.
- 3 A camel driver has covered 85 kilometres in one day.
Which type of camel is his camel most likely to be?
- A Arabian
 - B Bactrian
 - C either Bactrian or Arabian
 - D there is not enough evidence given
- 4 The most likely reason for the two types of camel having different types of feet is because they
- A have a different number of humps.
 - B carry different types of passengers.
 - C belong to different animal families.
 - D have to cover different types of ground.

- 5 The humps of both types of camel are used to
- A store water.
 - B aid in fat absorption.
 - C enable them to carry heavy loads.
 - D protect the camels from extreme temperatures.
- 6 Which of the following makes the camel an excellent animal for enduring difficult conditions?
- A They are used to carrying heavy loads.
 - B They can exist without water for several days.
 - C They can drink as much as 100 litres of water in ten minutes.
 - D Their hair is used to make cord, fine paint brushes and cloth.
- 7 Bactrian camels are smaller and heavier because they
- A have two humps.
 - B do not eat as much as Arabian camels.
 - C cover more distance than Arabian camels.
 - D have adapted to the demands of their environment.

Questions 8 – 11

The following passage is about the famous Russian ballerina, Anna Pavlova, who lived from 1881 to 1931, and founded her own dance company.

The 'girls' are ballet dancers in Pavlova's company.

Off-stage Pavlova chaperoned¹ her girls rigorously. At no time were any of them on terms of intimacy with her. In fact, off-stage as on, she awed them and they dreaded her disapproval. But respect was their over-riding feeling for her, she was a creature set apart, aloof, unapproachable, ageless. Not that Pavlova did not take a vivid personal interest in each of her girls. She did, thinking and planning for their good, but her approach to them was that of a sovereign to a member of her household. And not only did she know there was this great gulf between herself and the members of her company, but it was a gulf which she believed should exist. For on one occasion, when one of her dancers who had been with her for some time happened to club together with two new girls to give her flowers for Easter, she did not like it at all. 'You should not be on such terms with new members of my company,' she explained. 'They should feel to you as you feel to me.'

¹ *chaperone*: to accompany on outings, supervise

8 Which of the following best describes Pavlova's attitude towards her students?

- A controlling
- B indifferent
- C friendly
- D hostile

9 The relationship between Pavlova and her students is

- A malicious.
- B democratic.
- C affectionate.
- D unsentimental.

- 10** The narrator recounts the incident about the two new girls (lines 8–12) in order to show that Pavlova was mainly interested in
- A** obtaining the girls' admiration.
 - B** encouraging the girls' sense of independence.
 - C** fostering a sense of order in the dance company.
 - D** fostering close relationships among her students.
- 11** The structure of the ballet company described in the passage is most like that of a
- A** social club.
 - B** troop of soldiers.
 - C** panel of experts.
 - D** community of painters.

Question 12

Consider the expression, 'Fools rush in where angels fear to tread'.

- 12** The 'fools' in this saying are
- A** evil.
 - B** comical.
 - C** reckless.
 - D** quick-witted.

Questions 13 – 16

The following poem was written in the 8th century by the Chinese poet Tu Fu. It was translated into English by Kenneth Rexroth.

Jade Flower Palace

The stream swirls. The wind moans in
The pines. Grey rats scurry over
Broken tiles. What prince, long ago,
Built this palace, standing in
Ruins beside the cliff? There are 5
Green ghost fires in the black rooms.
The shattered pavements are all
Washed away. Ten thousand organ
Pipes whistle and roar. The storm
Scatters the red autumn leaves. 10
His dancing girls are yellow dust.
Their painted cheeks have crumbled
Away. His gold chariots
And courtiers are gone. Only
A stone horse is left of his 15
Glory. I sit on the grass and
Start a poem, but the pathos¹ of
It overcomes me. The future
Slips imperceptibly away.
Who can say what the years will bring? 20

Tu Fu

¹ *pathos*: a sense of pity or sorrow

13 According to the poem, 'the prince' (line 3) was

- A brave and loyal.
- B sensitive and intelligent.
- C self-righteous and dutiful.
- D ostentatious and powerful.

- 14 According to the poem, the palace is
- A opulent and magnificent.
 - B decaying and desolate.
 - C small and shabby.
 - D safe and secure.
- 15 The poem suggests that
- A time moves slowly.
 - B time conquers all things.
 - C people leave enduring monuments.
 - D great achievements are remembered forever.
- 16 The tone of the last line of the poem is best described as
- A reflective.
 - B confident.
 - C peaceful.
 - D cheerful.

Questions 17 – 21

The passage below is taken from a novel about a girl named Milli who lives in a town called Drabville.

Milli found the sameness of her town insufferable but inescapable. Every house was designed by the same architect, or, should I say, the architect designed one house and every other was replicated in its image. They were even painted the same colours: grey, with shiny black doors and brass doorknockers. The identical rectangular lawns sat side by side, not one branch of the knotted black trees lining the streets was out of place, and the square slabs of concrete making up the footpath were not blemished with even the smallest of stains. A greyness pervaded Drabville so thick that it not only obscured sunlight but drained the colour out of everything. Because of it butterflies were rarely seen, owls were wide awake at midday and silhouettes¹, had they been detectable, would probably have been mistaken for ogres. The town was dead, Milli thought; you could search its every nook and cranny and not find a single speck of individuality or colour. 5 10

For some time Milli had sensed something missing in the townsfolk too, but as she was unable to explain it to herself, there seemed little point in raising it with anyone else. She couldn't say exactly what it was that had left them, but she knew it was something important, something invaluable. 15

¹ *silhouettes*: shadows

17 The passage suggests that Drabville is

- A cramped and chaotic.
- B compact but untidy.
- C peaceful and scenic.
- D orderly but grim.

18 One reason why the 'owls were wide awake at midday' (line 9) was because

- A the days were dark in Drabville.
- B the owls fed on the butterflies during the day.
- C the sunlight kept the owls awake during the day.
- D the owls in Drabville were unable to sleep at night.

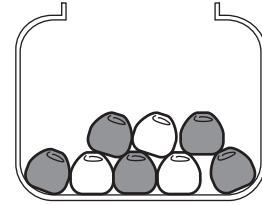
- 19** The statement ‘silhouettes, had they been detectable, would probably have been mistaken for ogres’(lines 9 and 10) suggests that
- A** ogres were common in Drabville.
 - B** people in Drabville liked fairytales.
 - C** people were unfamiliar with shadows in Drabville.
 - D** there was a lot of crime in Drabville.
- 20** Lines 14–16 suggest that Milli
- A** feels at home in Drabville.
 - B** is rude to the people of Drabville.
 - C** is afraid of the people in Drabville.
 - D** is different from the people in Drabville.
- 21** Milli is presented as
- A** angry and resentful.
 - B** observant and sensitive.
 - C** light-hearted and cheerful.
 - D** judgmental and demanding.

PART 2

Mathematical Reasoning

Questions 1 and 2

Dario has a jar containing three white chocolates and five brown chocolates.



- 1 Suppose Dario takes out and eats one of the white chocolates.

If he then takes out a second chocolate without looking, what is the chance that it will be brown?

- A five chances in eight
- B five chances in seven
- C four chances in eight
- D three chances in eight

- 2 Starting with the chocolates in the figure, suppose Dario takes out and eats two of the brown chocolates.

If he then takes out a third chocolate without looking, he has

- A a much greater chance of picking a white chocolate than a brown chocolate.
- B a slightly greater chance of picking a white chocolate than a brown chocolate.
- C a slightly greater chance of picking a brown chocolate than a white chocolate.
- D an equal chance of picking either a white or a brown chocolate.

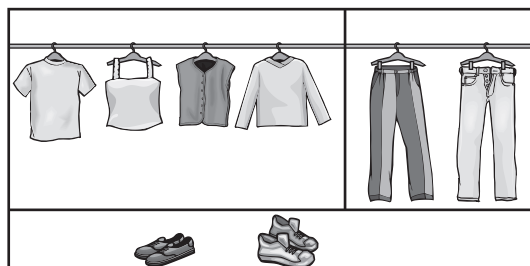
Question 3

- 3 Paula has these clothes in her wardrobe.

An outfit consists of one pair of shoes, one top and one pair of pants.

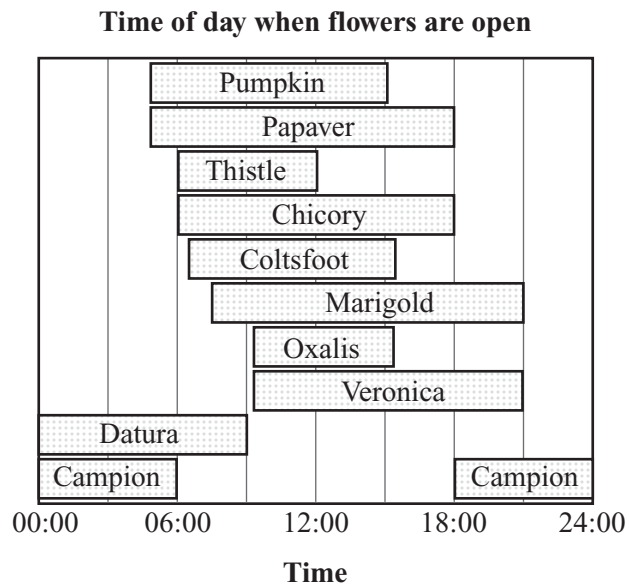
How many different outfits can Paula wear?

- A 12
- B 16
- C 20
- D 24



Questions 4 – 6

This chart shows the times during a 24-hour period when the flowers of ten different species of plant are open.



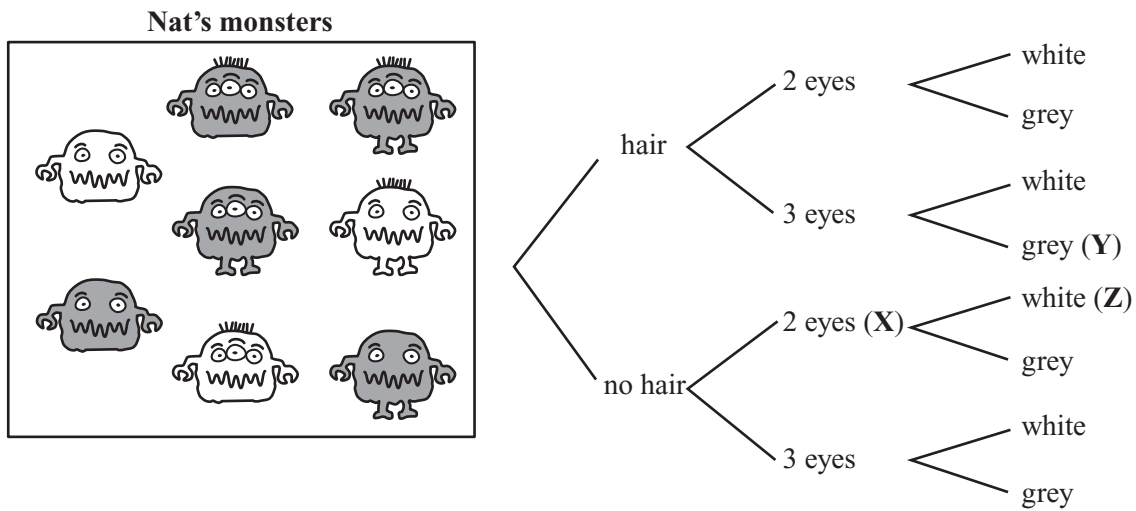
- 4 Which flower stays open the longest during a 24-hour period?
 - A Champion
 - B Chicory
 - C Marigold
 - D Veronica

- 5 Of the following, which flower is open for six hours per 24-hour period?
 - A Thistle
 - B Champion
 - C Coltsfoot
 - D Datura

- 6 Of the following, which flowers are open at some time between 21:00 and 06:00?
 - A Champion only
 - B Datura only
 - C both Champion and Datura
 - D neither Champion nor Datura

Questions 7 and 8

Nat has drawn 8 monsters.
She classified them using this chart.



7 How many of Nat's monsters belong at X?

- A none
- B one
- C two
- D three

8 Which of the following has exactly two monsters?

- A only Y
- B only Z
- C both Y and Z
- D neither Y nor Z

The graph indicates the rate at which bacteria and other microbes grow in fresh food, and the rate at which physical changes occur in relation to storage temperature.

Temperature	Bacteria	Other Microbes	Physical changes
10 °C	Rapid	Rapid	Rapid
0 °C	Slow	Slow	Rapid
-10 °C	None	None	Slow
-20 °C	None	None	Very Slow

- 14

Question 13

- 13 Consecutive whole numbers are numbers such as 2, 3, 4, 5 . . .

Seven consecutive whole numbers add to 63.

What is the middle number of the seven numbers?

- | | |
|------------|------------|
| A 3 | C 8 |
| B 6 | D 9 |

Question 14

- 14 Three ♥ cost the same as two ♦.

Five ★ cost the same as six ♥.

Which of the following is true?

- | | |
|--|---|
| A Five ★ cost the same as two ♦. | C Two ★ cost the same as five ♦. |
| B Five ★ cost the same as four ♦. | D Two ★ cost the same as four ♦. |

Question 15

- 15 Nat, Jarrod and Kate score a total of 84 points in a game.

Nat scores twice as many points as Jarrod and six more than Kate.

How many points does Jarrod score?

- | | |
|-------------|-------------|
| A 18 | C 30 |
| B 24 | D 36 |

Question 16

Tim has a bag containing only red, yellow and green jelly beans.

- The number of red jelly beans is 15.
- The number of yellow jelly beans is $\frac{1}{3}$ the number of red jelly beans.
- $\frac{1}{2}$ of his jelly beans are green.

- 16 How many of Tim's jelly beans are green?

- | | |
|-------------|-------------|
| A 9 | C 18 |
| B 10 | D 20 |

PART 3

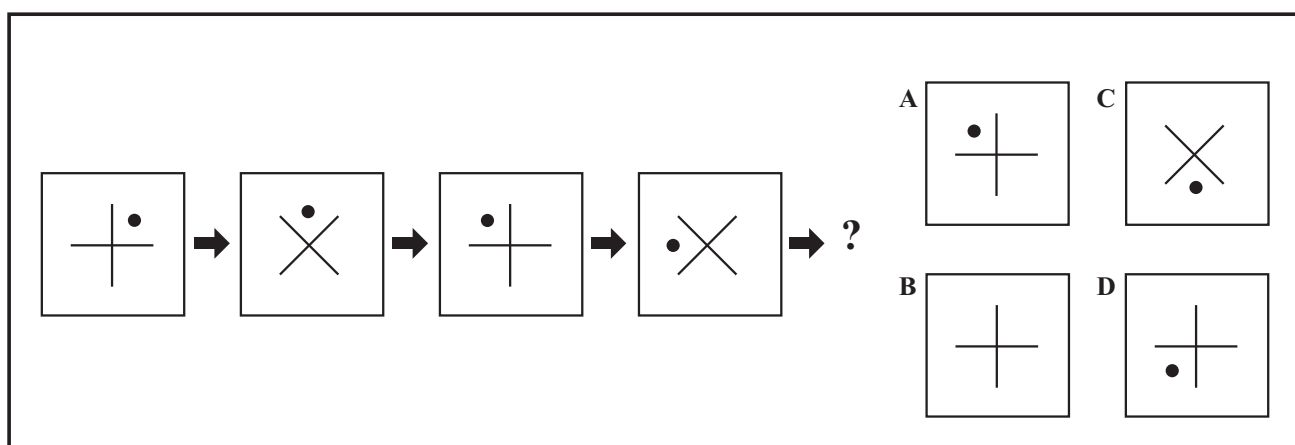
Abstract Reasoning

Next in Sequence

Questions 1 – 4

In each of the following items, there are four shapes forming a sequence going from left to right. You are to choose from the alternatives at the right (**A**, **B**, **C** and **D**) the one which would most logically come next in the sequence.

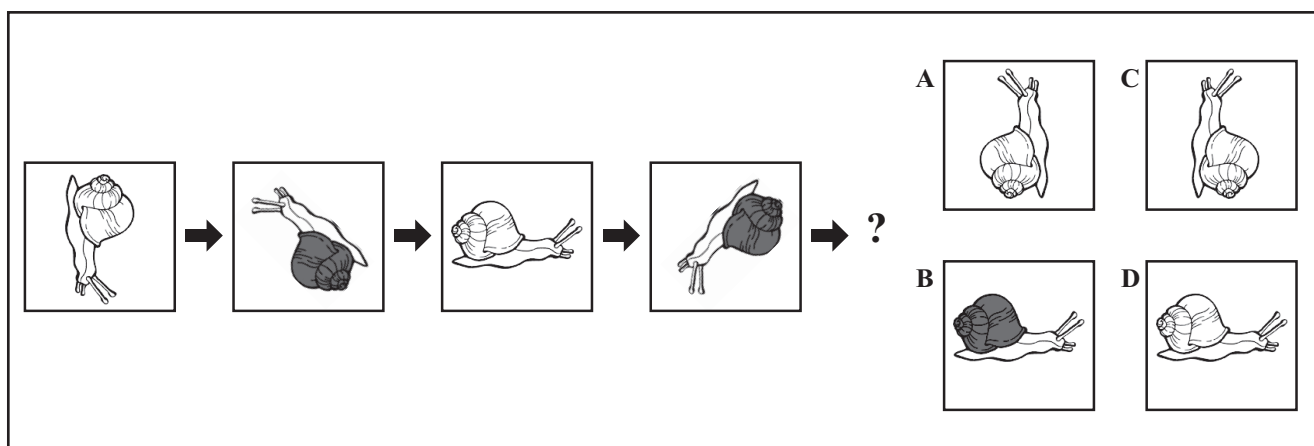
Example



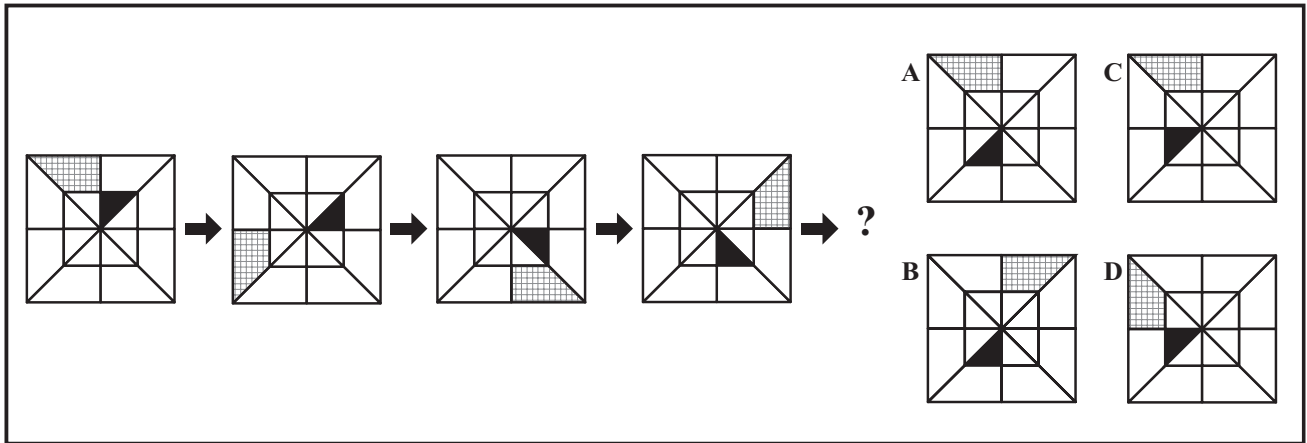
In the sequence above, the dot rotates anticlockwise, and the cross alternates between two positions, so **D** is the answer.

Alternatively, the whole pattern can be seen rotating 45° anticlockwise, again giving **D**.

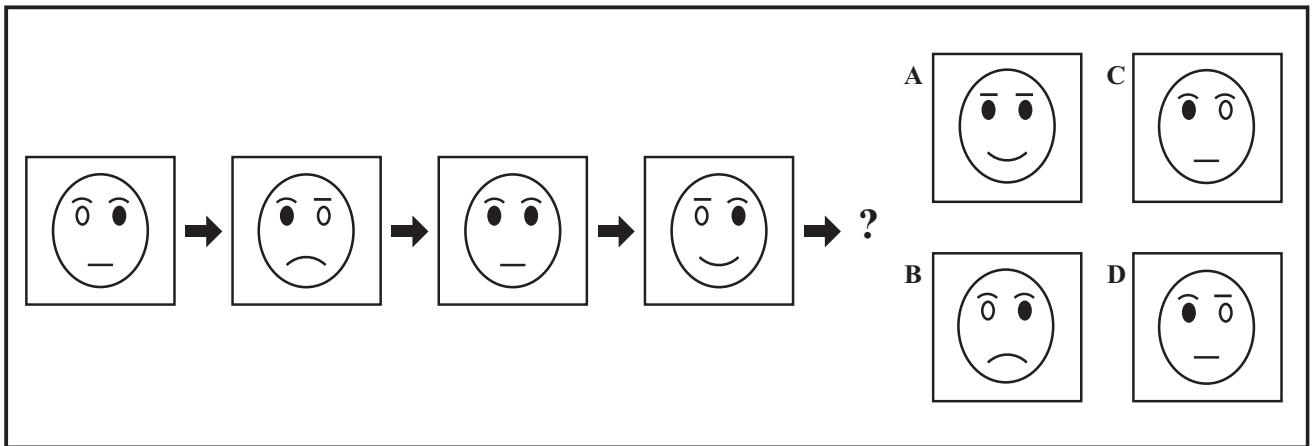
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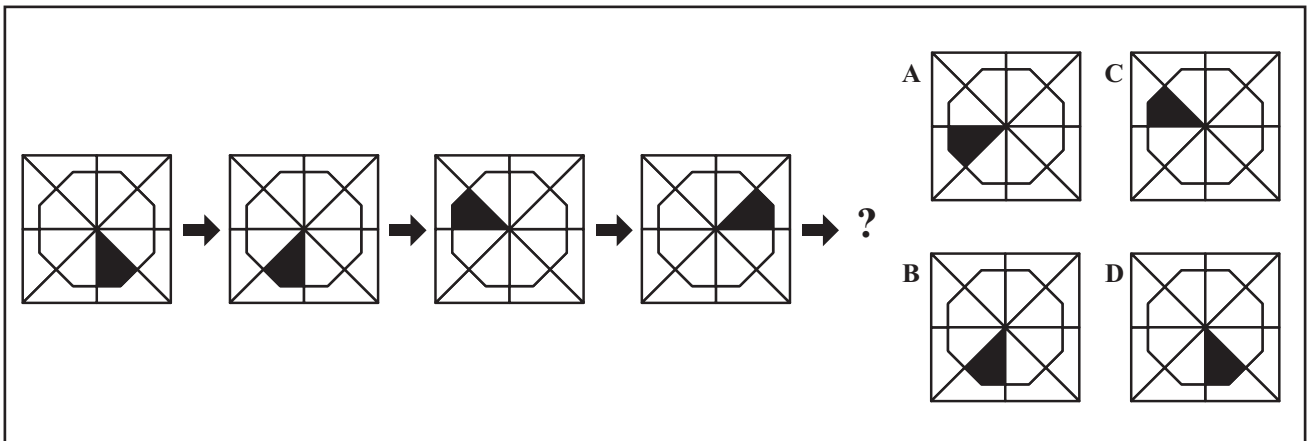
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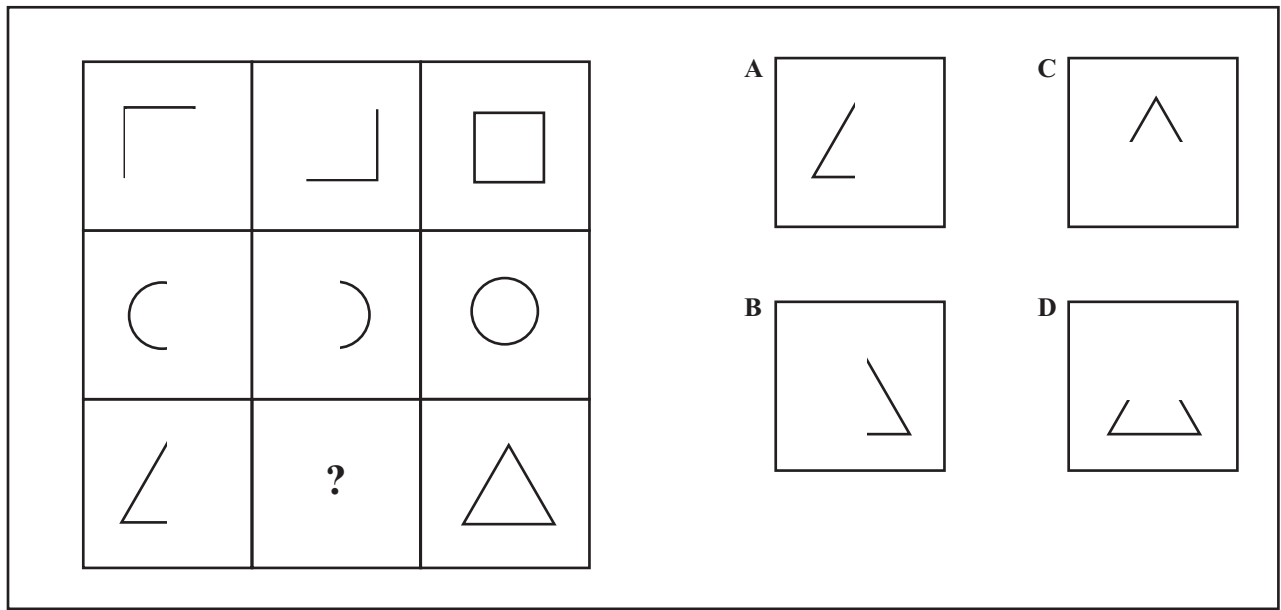
Complete the Pattern

Questions 5 – 8

In these questions there is a framework of squares, triangles or other shapes. Symbols are distributed around the framework according to a pattern.

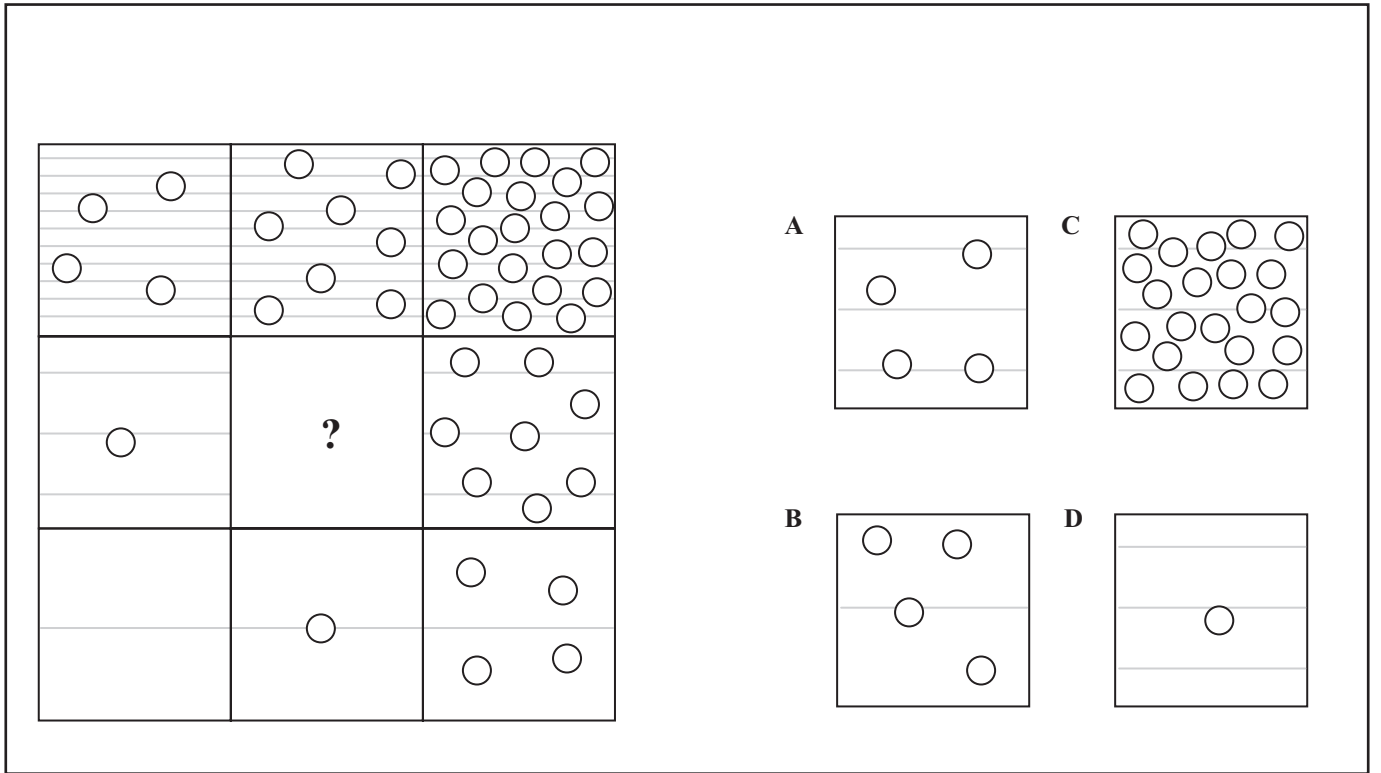
Part of the pattern, marked with a **?**, is missing. You are to choose from the alternatives **A**, **B**, **C** and **D** the one that most logically and simply completes the pattern.

Example

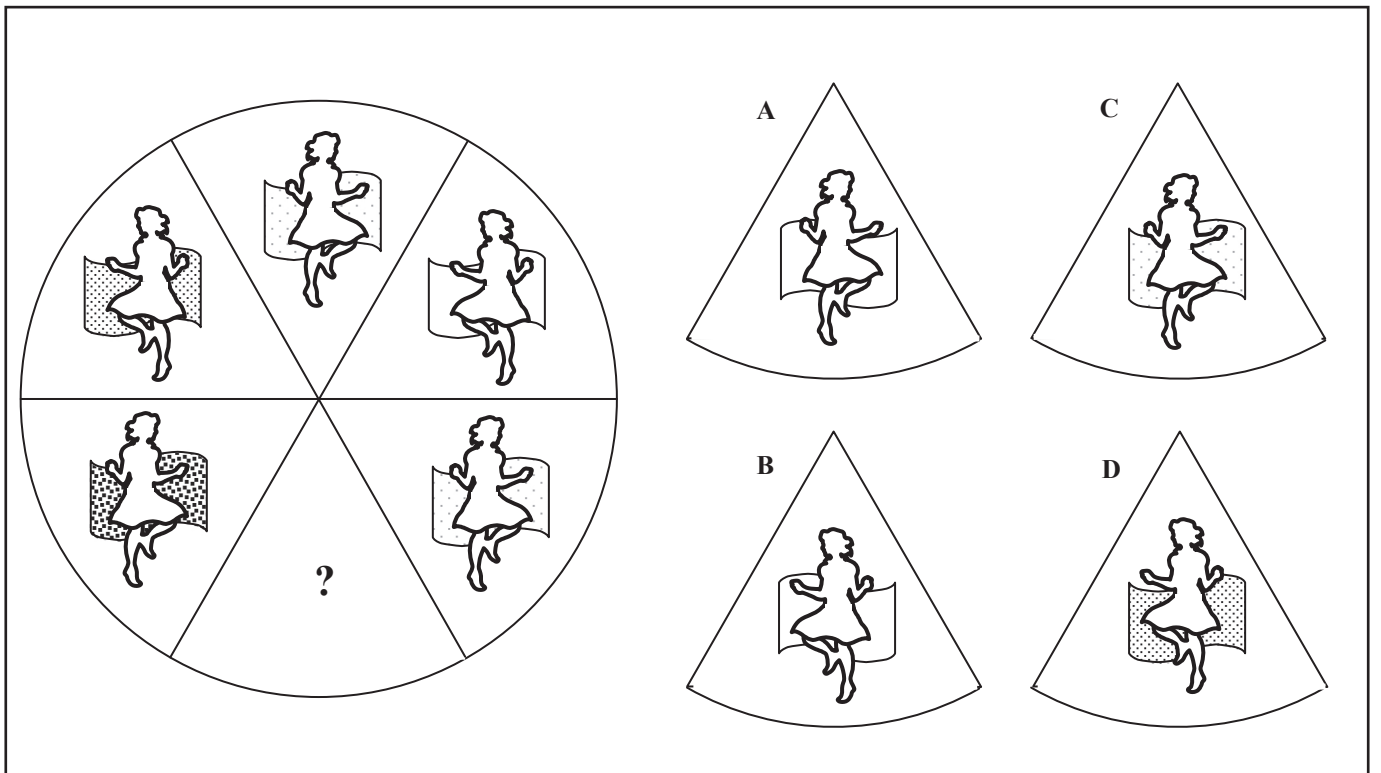


For each row, the shape in the third square is made by combining the shapes in the first two squares.
So **B** is the answer.

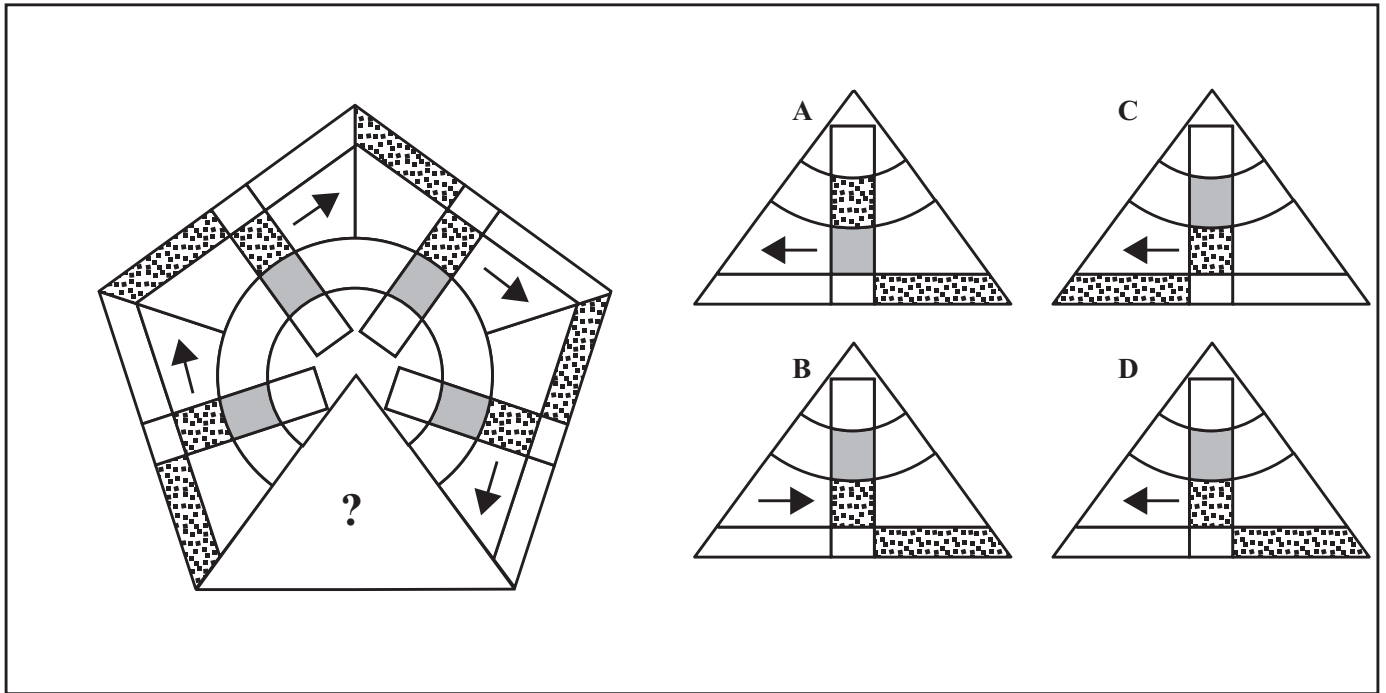
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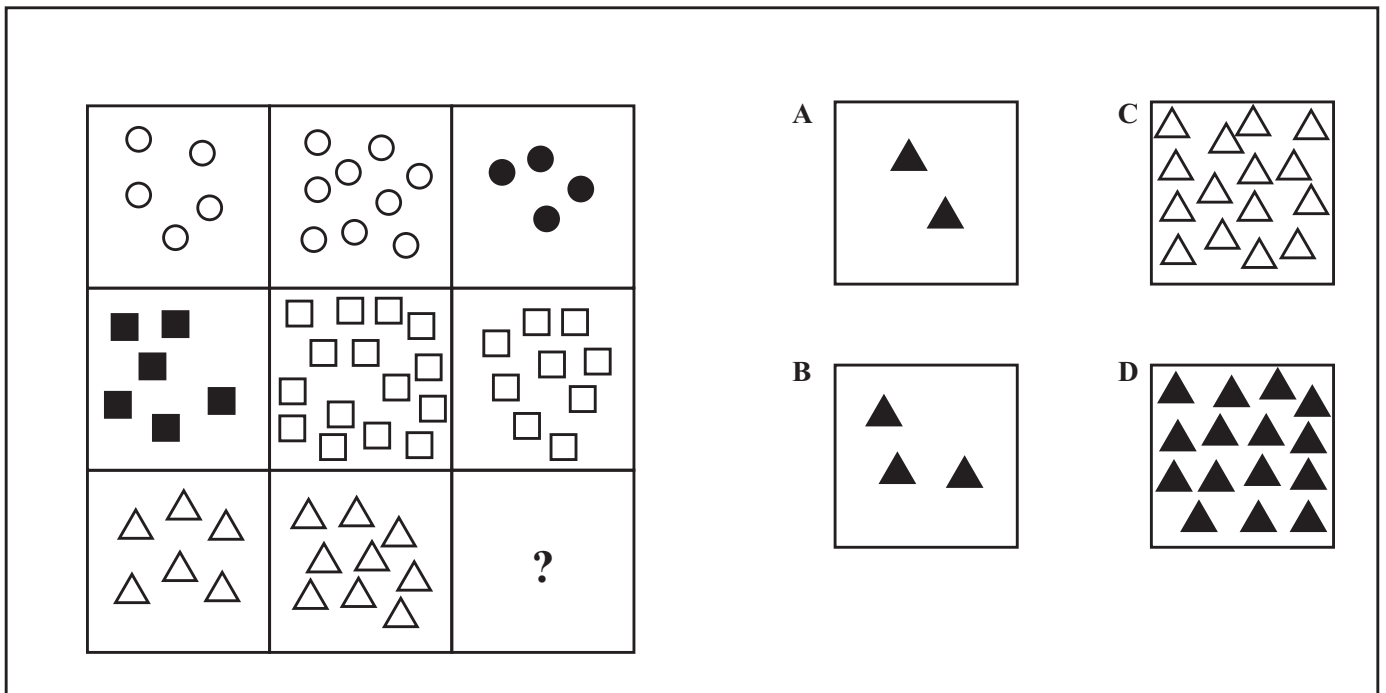
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7



8

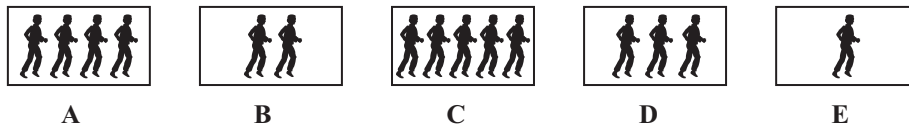


Middle of Sequence

Questions 9 – 12

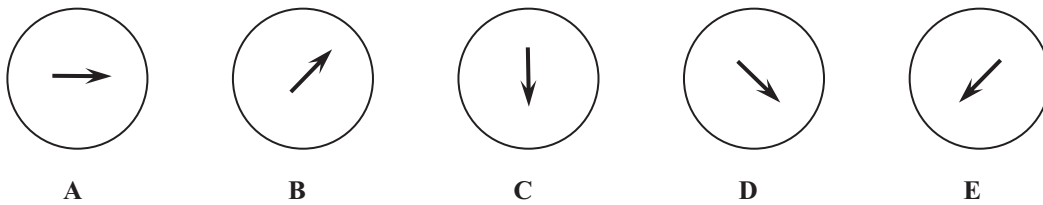
In each of the following items, five objects or patterns can be rearranged to form a logical sequence. You are to select the alternative (A, B, C, D or E) that is the middle object in the sequence.

Example

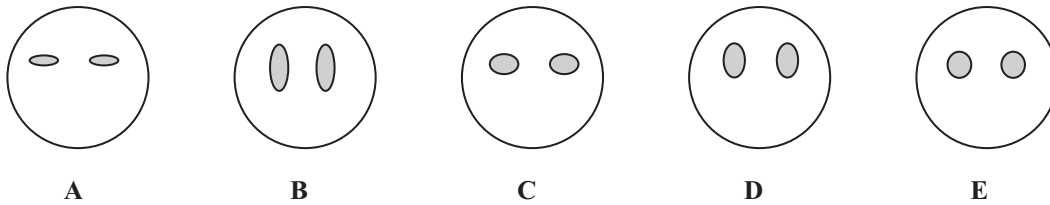


In the sequence above, the arrangement will be E, B, D, A, C (or C, A, D, B, E). So D is the answer.

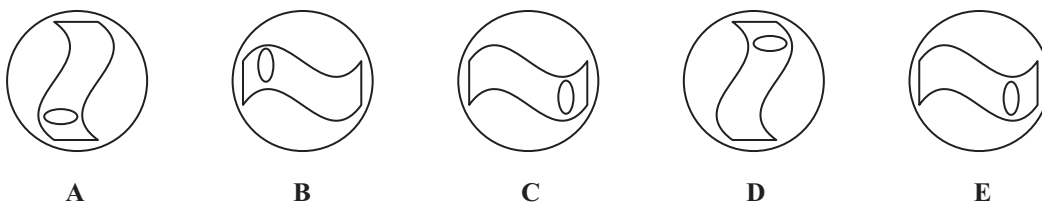
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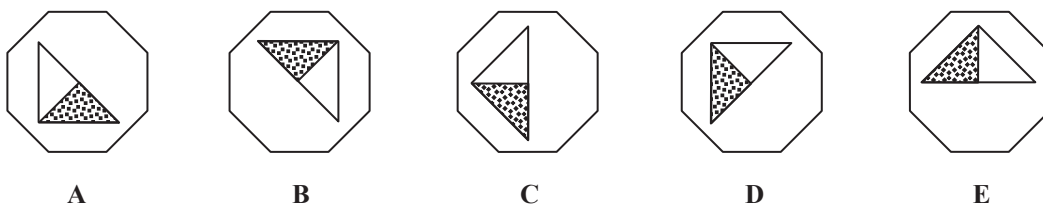
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11



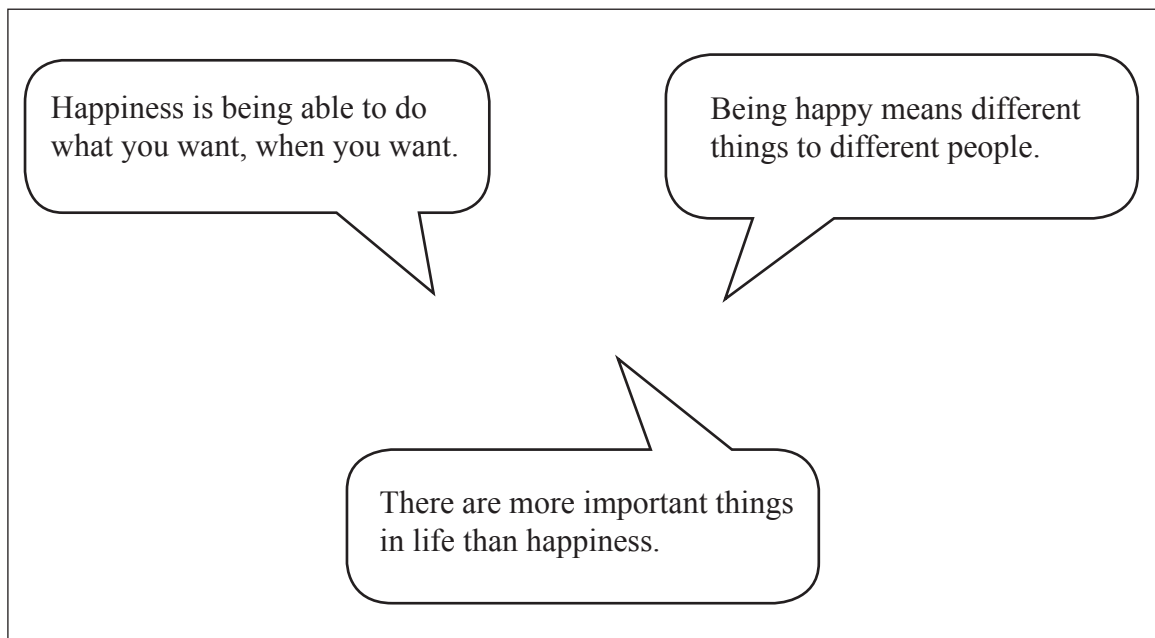
12



Written Expression (discussion)

Use the following ideas as the basis for a piece of writing.

Here are some opinions about happiness.



What do you think about happiness? Write a piece giving your ideas.

Give your piece of writing a title.

Your piece of writing will be judged on what you have to say, how well you organise what you have to say, and how clearly and effectively you express yourself.

Written Expression (creative)

Use the following picture as the basis for a piece of writing.

Your piece of writing will be judged on the kinds of situations, characters, events and feelings that you present, and on how well you express yourself and engage the interest of the reader.



Answers

Reading Comprehension

1	A	8	A	15	B
2	C	9	D	16	A
3	A	10	C	17	D
4	D	11	B	18	A
5	B	12	C	19	C
6	B	13	D	20	D
7	D	14	B	21	B

Mathematical Reasoning

1	B	7	D	13	D
2	D	8	A	14	B
3	B	9	C	15	A
4	C	10	C	16	D
5	A	11	D		
6	C	12	D		

Abstract Reasoning

1	A	5	A	9	D
2	A	6	D	10	E
3	C	7	D	11	B
4	A	8	B	12	D

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ACKNOWLEDGMENTS — Streatfeild, N., ‘Anna Pavlova: Prima Ballerina’ in Eric Duthie (ed), *The Children’s Book of Famous Lives*, London, Odhams Press, 1967, p. 310; Rexroth, K., from the original by Tu Fu, in ONE HUNDRED POEMS FROM THE CHINESE, © 1971 by Kenneth Rexroth. Reprinted by permission of New Directions Publishing Corp; Adornetto, A., *Shadow Thief*, Harper Collins, 2008, by permission of Harper Collins Australia.