Critical Thinking Skills

FOR SELECTIVE SCHOOL TESTS, OPPORTUNITY CLASS TESTS AND PROBLEM SOLVING

BOOK 3

SAMPLE

Mohan Dhall

Five Senses Education Pty Ltd
2/195 Prospect Highway
Seven Hills 2147
New South Wales
Australia

Copyright ©Mohan Dhall, M2K Education and Advisory P/L
and Five Senses Education Pty Ltd
First Published 2023

All rights reserved. Except under the conditions described in the Copyright Act 1968 of Australia and subsequent amendments, no part of this publication may be reproduced, stored in a retrieval system or transmitted in any form or by any means electronic, mechanical, photocopying, recording or otherwise, without the prior permission of the copyright owner.

Dhall, Mohan
Critical Thinking Skills – Book 3

ISBN 978-1-76032-486-5

2023 03 27

SAMPLE

Contents

Foreword	iv
Critical Thinking – An Introduction	1
Critical Thinking Problems	5
Answers	58
Summary of Answers	59
Fully Worked Solutions	60
Multiple Choice Answer Sheets	101

SAMPLE

© Mohan Dhall
© Five Senses Education Pty Ltd

Question 1

Robert, Jules, Quincy, Kang and Yaozhang were all walking up the stairs to their theatre seats. Three people pass Quincy. There is one person higher up than Kang. Jules is closest to the stage.

Which of the following cannot be true?

A. Robert sits in the highest row

B. Three people are closer to the stage than Kang

C. Yaozhang is in the same row as Quincy

D. Robert is closer to the stage than Kang and Yaozhang

Question 2

A millionaire is a person who has a net worth of over one million dollars. Net worth means that they own property or assets worth over one million dollars after they deduct what they owe. Some people believe that in calculations of who is a millionaire, the value of the family home should not be included.

Joseline: If Erin earns over one million dollars per year, she is a millionaire

Freyma: If Erin's house is valued at four million dollars, she is a millionaire

If the words in **bold** are true, then whose reasoning is correct?

A. Both Joseline and Freyma

B. Neither Joseline nor Freyma

C. Joseline only

D. Freyma only

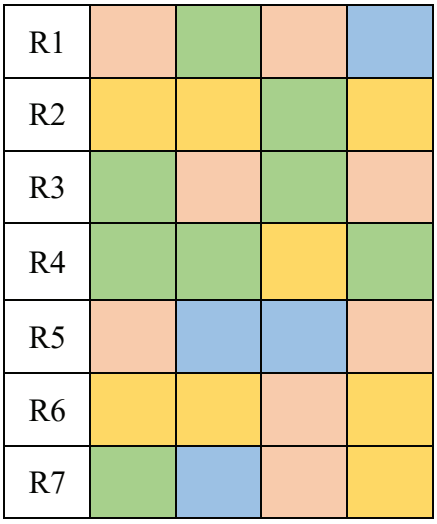
SAMPLE

© Mohan Dhall
© Five Senses Education Pty Ltd

Question 3

Look closely at the arrangement below.

Each row should be a single block of colour.



What is the smallest number of swaps between individual coloured squares required to achieve this?

A. 5

B. 6

C. 7

D. 8

SAMPLE

© Mohan Dhall
© Five Senses Education Pty Ltd

Question 4

The Bernoulli Effect explains why aircraft wings are shaped as they are. The curve on the upper surface of the wing allows the air to move faster, creating a lower pressure, which in turn creates a lifting force.

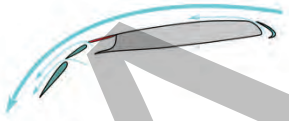
In addition, the following rules apply:

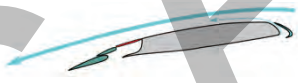
- For cruising speed, the wings need to be as flat and as smooth as possible, with no turbulence
- When taking off, a plane needs a larger wingspan to boost the lifting forces
- When landing, a plane needs the largest possible wingspan so that the downwards pressure is greatest
- When braking after landing, a plane needs the greatest disruption to airflow so that drag, slowing the aircraft, is maximised.

Which of these diagrams would be the shape of an aircraft wing when taking off?

A. 

B. 

C. 

D. 

SAMPLE

© Mohan Dhall
© Five Senses Education Pty Ltd

Fully Worked Solutions

Question 1

C.

The known order is:

1 ?(highest and furthest from the stage), 2 Kang, 3 ?, 4 Quincy, 5 Jules (lowest and closest to the stage)

1 and 3 must be either Yaozhang or Robert.

Question 2

B.

Neither is correct.

There is a difference between what a person earns and what they own. So, Erin may earn a lot and spend it all. We cannot determine whether she is a millionaire from her income. As regards Freyma, we do not know what is owed on Erin's house so we cannot determine her net wealth and hence cannot conclude she is a millionaire.

SAMPLE

© Mohan Dhall
© Five Senses Education Pty Ltd