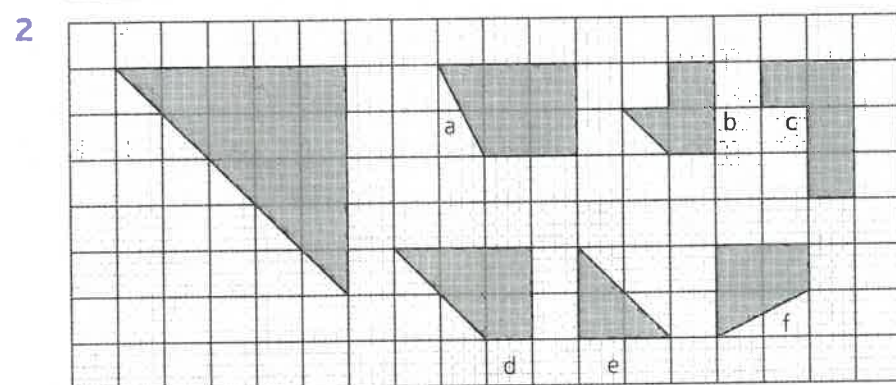
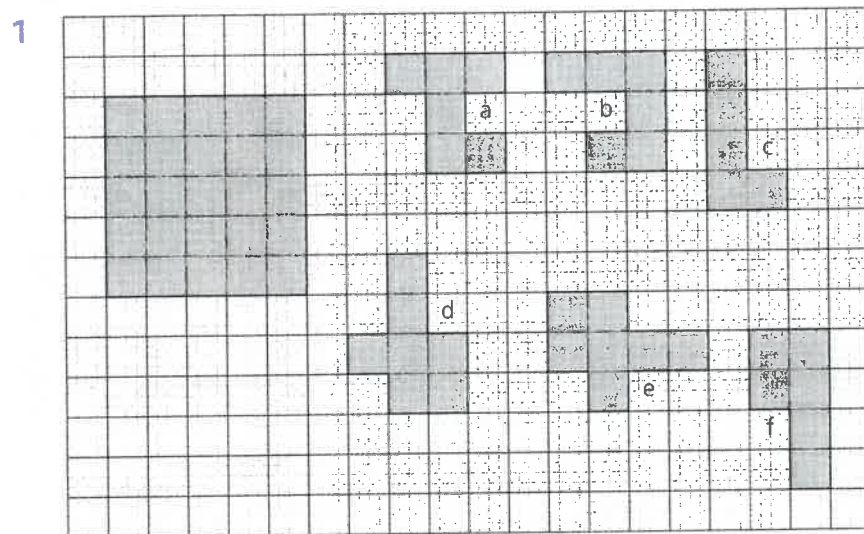


# Maths workout 1

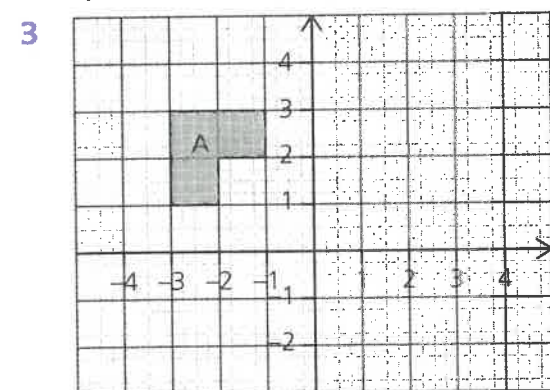
Many Non-Verbal Reasoning problems make use of mathematical skills and knowledge, so these pages contain some questions and puzzles to consolidate your mathematical skills, vocabulary and ideas. Keeping your maths skills sharp will help you to solve Non-Verbal Reasoning questions more quickly!

## Working with 2D shapes

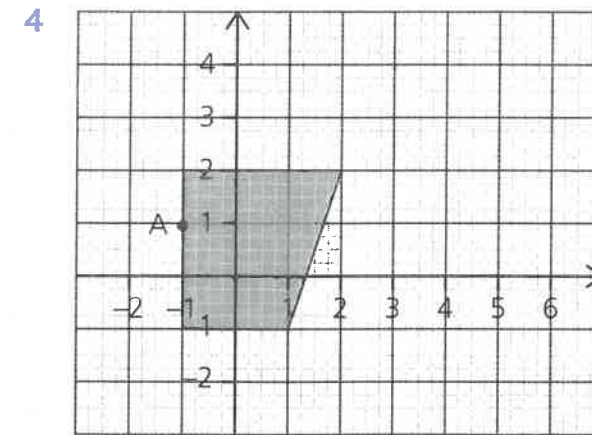
In the first two questions, which four pieces on the right can be put together to complete the 2D shape on the left? Circle the letters of your answer choices.



In the next two questions, move the 2D shapes by the number of squares instructed. Draw their new position and give the co-ordinates for the new position of point A.



- i right 4, down 2      new co-ordinates for point A (\_\_\_\_, \_\_\_\_)
- ii down 1, right 5      new co-ordinates for point A (\_\_\_\_, \_\_\_\_)

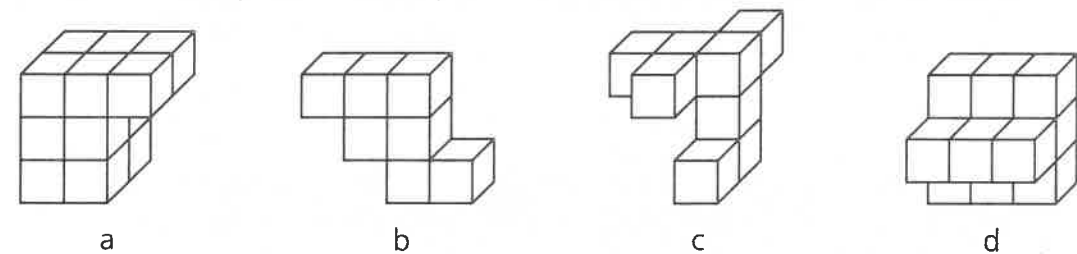


- i up 2, right 4      new co-ordinates for point A (\_\_\_\_, \_\_\_\_)
- ii right 3, down 1      new co-ordinates for point A (\_\_\_\_, \_\_\_\_)

Score  / 6

## Working with 3D shapes

1 If each of these piles is made up of 1 cm cubes, what is the total surface area of each pile?



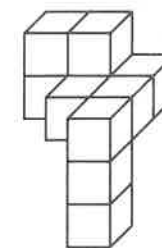
Pile a: \_\_\_\_\_

Pile c: \_\_\_\_\_

Pile b: \_\_\_\_\_

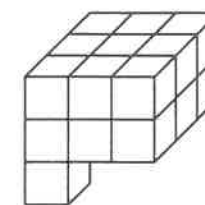
Pile d: \_\_\_\_\_

2 If the outer surface of these piles of cubes were painted red, how many cubes would have:



(a) i three painted faces? \_\_\_\_\_

ii five painted faces? \_\_\_\_\_



(b) i three painted faces? \_\_\_\_\_

ii five painted faces? \_\_\_\_\_

Score  / 8