

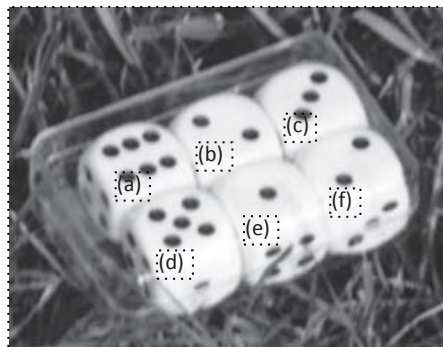
Part B

NUMBER CUBES

Dice are special number cubes for which the following rule applies:
The total number of dots on two opposite faces is always seven

QUESTION 10: In this photograph you see six dice, labelled (a) to (f).

Write in each box the number of dots on the bottom face of the dice corresponding to the photograph.



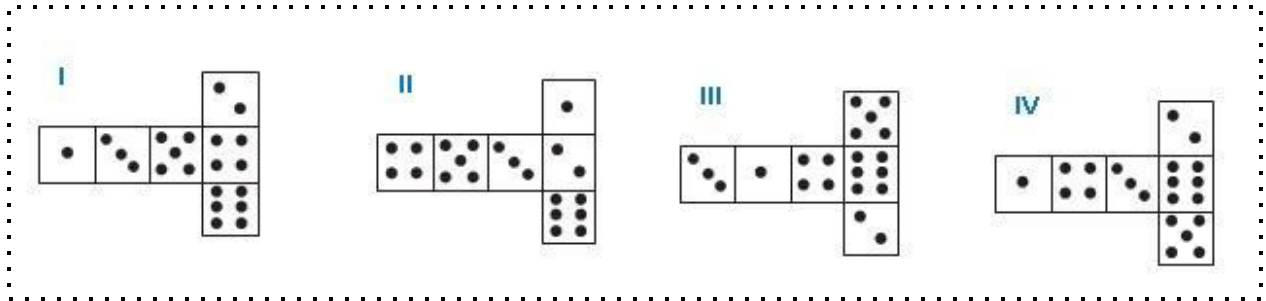
(a)	(b)	(c)
(d)	(e)	(f)

QUESTION 11: On the right, there is a picture of two dice.

You can make a simple number cube by cutting, folding and gluing cardboard. This can be done in many ways. In the figure below you can see four cuttings that can be used to make cubes, with dots on the sides.



Which of the following shapes can be folded together to form a cube that obeys the rule that the sum of opposite faces is 7? For each shape, circle either “Yes” or “No” in the table below.



Shape	Obeys the rule that the sum of opposite faces is 7?
I	Yes / No
II	Yes / No
III	Yes / No
IV	Yes / No

The solution for Part B is explained in Video Solution.