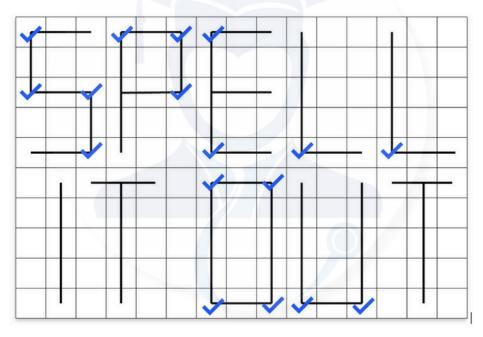
## Question 1, 2016



If the given pattern is rotated in 90', 180' and 270', it can be used in 4 different positions.



## **Question 10, 2016**

If we break down the given tiles, the following patterns can be noticed.

2 tiles --- 2 small parts of a circle of the same size.



2 tiles — one large circle part and one small circle part



2 tiles — one large circle part



We can exclude option B because there are 3 tiles with one large circle part and one small circle part. Exclude option C because there is an irregular tile. Exclude option D because there are 3 tiles with 2 small parts of a circle of the same size. Exclude option E because there are 3 tiles with 2 small parts of a circle of the same size.

Therefore, the patterns can also be made from the same six tiles is the one from option A.

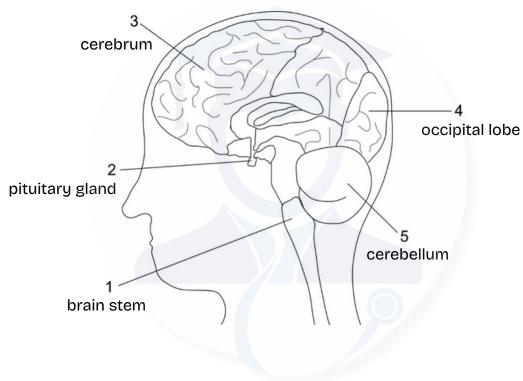


If the left top corner is the middle part of the paper, then there would be a square hole in the middle when unfolded. And a circle top and bottom of that square hole.

If the right bottom corner is the middle part of the paper, then there would be a diamond 4-sided shaped hole in the middle when unfolded. No circle above and below the hole.

Therefore, it is obvious that option E cannot possibly be the appearance of the paper after I unfold it.





Possible straight chain structural isomers