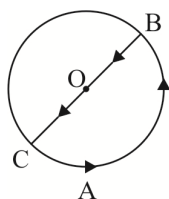


Class-7

MAT

- 1.(B)** The top left hand number is obtained by adding the bottom two numbers. The top right hand number is the result of dividing the bottom two numbers.
 Thus, $12 + 3 = 15$, $12 \div 3 = 4$
 $22 + 11 = 33$, $22 \div 11 = 2$
 $18 + 9 = 27$, $18 \div 9 = 2$
 So, $32 + X = 36$ and $32 \div X = 8$
 $X = 4$ and $X = 4$
- 2.(C)** G is to the right of D and to the left of B i.e, D, G, B. A is on the right of C i.e, C, A. E and B have two children between them i.e, E, D, G, B. A and D have two children between i.e., C, A, E, D, G, B. Since D and F have two children between them, the arrangement from left to right in the line becomes : C, A, E, D, G, B, F.
 → D is exactly in the middle.
- 3.(C)** The movements are as indicated (O to A, A to B, B to C).
 Clearly, C lies to the south-west of O.



- 4.(C)** The required region is the one which lies inside the circle Y but is not a part of either circle X or circle Z i.e., 6.

- 5.(A)** Number of boys in front of Richard = 14

Number of boys behind Richard = $14 \times 3 = 42$

∴ Total no. of boys in the column = $(14 + 1 + 42) = 57$

In a column of 57 boys, the seventh boy from the end is clearly 51st from the start. Thus, we have to find the number of boys between the 15th and the 51st boy, which is clearly 35.

MATHS

- 1.(C)** 22 minutes
 Midnight less 22 min = 11.38
 Less 32 min = 11.06
 10 p.m (22.00) plus 66 min (22×3) = 11.06
- 2.(a)** 195
 The number of votes the winning candidate received was

$$\frac{963 + 53 + 79 + 105}{4} = 300$$

 The second received = $300 - 53 = 247$
 The third received = $300 - 105 = 195$
- 3.(B)** 10 pm
 12 noon = 12 noon
 1 pm = 12.43 pm
 2 pm = 1.26 pm
 3 pm = 2.09 pm
 4 pm = 2.52 + 6 hour = 10 pm

Physics

- 1.(C)** As he moves along a straight line, his motion is rectilinear. The motion repeats itself after a fixed time period, so his motion is periodic also.
- 2.(B)** Both the ends of bar B attracted by a magnet. So, it is just an iron bar. Thus we can conclude that bar C is a magnet. (Since it is given that 2 out of the 3 bars are magnets.)

Chemistry

- 1.(A) Alum is used to settle down small solid and process is known as loading.
- 2.(D) (i) By freezing we can get frozen ice candy.
(iii) If we leave mixture of salt and water for long time water will evaporate and we can get salt back.