

1

$\frac{3}{8}$  of all students at Social High are in all three of the following clubs: Albanian, Bardic, and Checkmate.  $\frac{1}{2}$  of all students are in Albanian,  $\frac{5}{8}$  are in Bardic, and  $\frac{3}{4}$  are in Checkmate. If every student is in at least one club, what fraction of the student body is in exactly 2 clubs?

- (A)  $\frac{1}{8}$
- (B)  $\frac{1}{4}$
- (C)  $\frac{3}{8}$
- (D)  $\frac{1}{2}$
- (E)  $\frac{5}{8}$

2

In a class of 50 students, 20 play Hockey, 15 play Cricket and 11 play Football. 7 play both Hockey and Cricket, 4 play Cricket and Football and 5 play Hockey and football. If 18 students do not play any of these given sports, how many students play exactly two of these sports?

- A. 12
- B. 10
- C. 11
- D. 15
- E. 14

3

In a group of 68 students, each student is registered for at least one of three classes - History, Math and English. Twenty-five students are registered for History, twenty-five students are registered for Math, and thirty-four students are registered for English. If only three students are registered for all three classes, how many students are registered for exactly two classes?

- A. 13
- B. 10
- C. 9
- D. 8
- E. 7

4

At company X, 44% of the employees that own laptops do not own cellphone, and 30% of the employees that own cellphone do not own laptops. If the number of employees without laptops is 40% less than the employees with laptops, the what percent of the company's employees neither own a laptop nor a cellphone ??

- A. 17.5
- B. 22.5
- C. 24
- D. 26
- E. 28

5

There are 150 students at Seward High School. 66 students play baseball, 45 play basketball, and 42 play soccer. 27 students play exactly two sports, and three students play all three of the sports. How many of the 150 students play none of the three sports?

- A. 0
- B. 27
- C. 30
- D. 99
- E. 78

6