SECTION - II
MATHEMATICAL SKILLS

Q8. A screwdriver and a hammer currently have the same price. If the price of a screwdriver rises by 5% and the price of a hammer goes up by 3%, how much more will it cost to buy 3 screwdrivers and 3 hammers?

(1) 3%   (2) 4%   (3) 5%   (4) 8%

Q9. If n and p are both odd numbers, which of the following numbers must be an even number?

(1) n+p   (2) np   (3) np+2   (4) n+p+1

Q10. There are 30 socks in a drawer. 60% of the socks are red and the rest are blue. What is the minimum number of socks that must be taken from the drawer without looking in order to be certain that atleast two blue socks have been chosen?
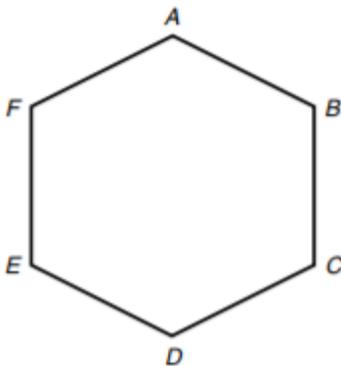
1) 2
2) 3
3) 24
4) 20

Q11. The ratio of chickengs to pigs to horses on a farm can be expressed as the triple ratio 20 : 4 : 6. If there are 120 chickens on the farm, then the number of horses on the farm is

1) 4
2) 6
3) 24
4) 36

Q12. If $x^2 - y^2 = 15$ and $x + y = 3$, then $x - y$ is

(1) -3   (2) 0   (3) 3   (4) 5

Q13. The hexagon ABCDEF is regular. That means all its sides are the same length and all its interior angles are the same size. Each side of the hexagon is 2 feet. What is the area of the rectangle BCEF?

1) 4 m^2
2) 4 π^3-m^3
3) 8 m^2
4) 4+4π^3-m^2

Q14. A worker is digging a ditch. He gets 2 assistants who work 2/3 as fast as he does. If all 3 work on a ditch they should finish it in what fraction of the time that the worker takes working alone?

(1) 3/7 (2) 1/2 (3) 3/4   (4) 4/3