1) Divide 1870 into three parts in such a way that half of the first part, one-third of the second part and one-sixth of the third part are equal.

a) 241, 343, 245
b) 400, 800, 670
c) 470, 640, 1160
d) None of these

2) If $6x^2 + 6y^2 = 13xy$, what is the ratio of x:y?

a) 1:4
b) 3:2
c) 4:5
d) 1:2

3) Divide 500 among A, B, C and D so that A and B together get thrice as much as C and D together, B gets four times of what C gets and C gets 1.5 times as much as D. Now the value of what B gets is

a) 300
b) 75
c) 125
d) 150

4) If a, b, c, d are proportional, then
(a – b) (a – c)/a =

a) a + c + d
b) a + d – b – c
c) a + b + c + d
d) a + c – b – d

5) If a, b, c and d are proportional then the mean proportion between $a^2 + c^2$ and $b^2 + d^2$ is

a) ac/bd
b) ab + cd
c) a/b + d/c
d) $\frac{a^2}{b^2} + c^2/d^2$

6) The speeds of three cars are in the ratio 2:3:4. The ratio between the times taken by these cars to travel the same distance is

a) 2:3:4
b) 4:3:2
c) 4:3:6
d) 6:4:3

7) The present ratio of ages of A and B is 4:5. 18 years ago, this ratio was 11:16. Find the sum total of their present ages.

a) 90 years
b) 105 years
c) 110 years
d) 80 years

8) Four numbers in the ratio 1:3:4:7 add up to give a sum of 105. Find the value of the biggest number.

a) 4
b) 35
c) 4
d) 63

9) After an increment of 7 in both the numerator and denominator, a fraction changes to 3/4. Find the original fraction.

a) 5/12
b) 7/9
c) 2/5
d) 3/8

10) The difference between two positive numbers is 10 and the ratio between them is 5:3. Find the product of the two numbers.

a) 375
b) 175
c) 275
d) 125

Answers:

1 – D

2 – B

3 –A

4 – B

5 – B

6 – D

7 – A

8 – C

9 – C

10 – A