



1. A man reduces his weight in the ratio 15 : 10. What is his weight now, if originally he was 83 kg ?

- (i) 56 kg (ii) $\frac{167}{3}$ kg (iii) $\frac{166}{3}$ kg (iv) $\frac{172}{3}$ kg (v) $\frac{169}{3}$ kg

2. A certain amount has been divided into two parts in the ratio 5 : 3. If the first part is 190, find the total amount.

- (i) 307 (ii) 304 (iii) 301 (iv) 305 (v) 303

3. A bag contains ₹210 in the form of five-rupee, two-rupee and one-rupee coins in the ratio 3 : 10 : 7. Find the number of coins of each type

- (i) 16 , 55 , 30 (ii) 13 , 55 , 35 (iii) 14 , 50 , 40 (iv) 17 , 45 , 35 (v) 15 , 50 , 35

In an examination, the ratio of passes to failures was 2 : 1.

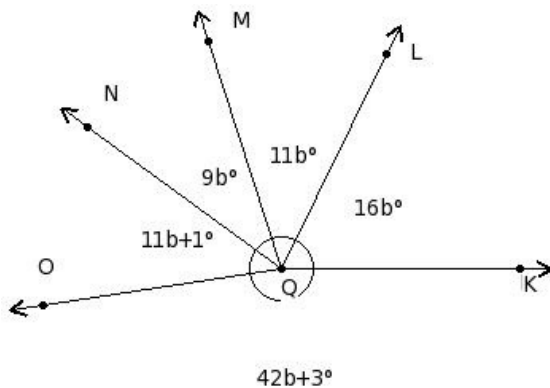
4. Had 50 less appeared and 5 less passed, the ratio of passes to failures would have been 35 : 9. How many students appeared for the examination?

- (i) 275 (ii) 270 (iii) 260 (iv) 280 (v) 265

5. In a company, the number of engineers to managers is in the ratio 3 : 1 . After a year, when 5 engineers and 5 managers left, the ratio between engineers to managers is 53 : 17 . Find the number of engineers and managers at the beginning?

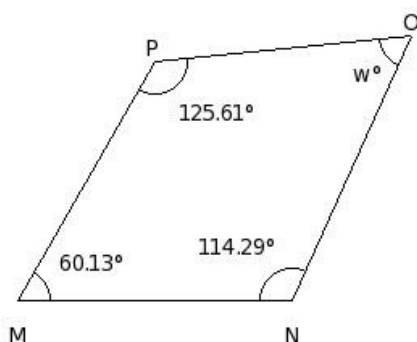
- (i) 340 (ii) 370 (iii) 360 (iv) 350 (v) 380

6. Find the value of 'b' in the following figure



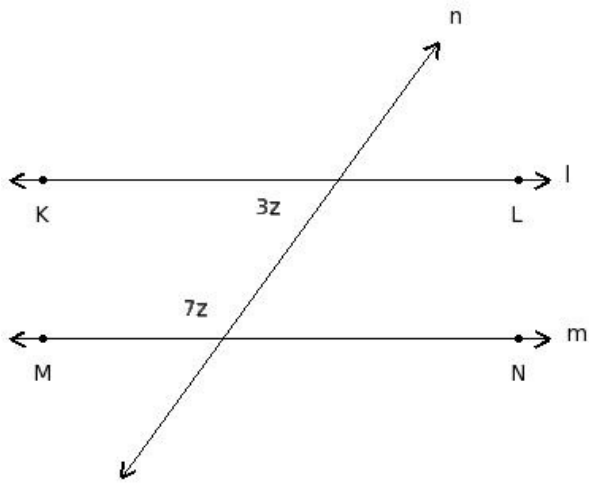
- (i) 7 (ii) 4 (iii) 1 (iv) 3 (v) 5

7. Find the missing angle in the given quadrilateral



- (i) 89.97° (ii) 74.97° (iii) 64.97° (iv) 59.97° (v) 69.97°

8. In the given figure $l \parallel m$. Find the value of 'z'



- (i) 19 (ii) 21 (iii) 17 (iv) 18 (v) 15

9. The work done by $(22x + 1)$ men in $(x + 1)$ days and work done by $(5x + 1)$ men in $(10x + 1)$ days is in the ratio of $45 : 77$. Find the value of x

- (i) 0 (ii) 1 (iii) 2 (iv) 4 (v) 3

10. Two numbers are in the ratio $7 : 2$ and their difference is 105. Find the numbers.

- (i) 147,39 (ii) 147,44 (iii) 146,42 (iv) 148,42 (v) 147,42

11. The sides of a triangle are in the ratio $\frac{1}{8} : \frac{1}{4} : \frac{1}{8}$ and its perimeter is 68 cm.

Find the lengths of the sides of the triangle

- (i) 12 cm : 39 cm : 17 cm (ii) 22 cm : 34 cm : 12 cm (iii) 12 cm : 34 cm : 22 cm (iv) 17 cm : 34 cm : 17 cm
(v) 22 cm : 29 cm : 17 cm

12. An office contains 689 employees of 4 types. The managers, team leaders, developers and testers are in the ratio $4 : 1 : 3 : 5$. The number of managers in the office =

- (i) 212 (ii) 210 (iii) 214 (iv) 213 (v) 211

13. The speed of a motor boat is 14.17 m/sec and the speed of a stream is 9.17 m/sec. A & B are two location adjacent to a stream. If it takes 593.27 sec to go from point A to B and come back, What is the distance between A and B?

- (i) 2442.00 m (ii) 2444.00 m (iii) 2445.00 m (iv) 2441.00 m (v) 2443.00 m

14. A student walks from his house to school at 4.94 kmph and arrives 5.30 min late. The next day he walks at 7.18 kmph and reaches the school 10.90 min before time. What is the distance from his house to school?

- (i) 3.27 km (ii) 4.27 km (iii) 2.27 km (iv) 6.27 km (v) 5.27 km

15. A train crosses a telegraph post in 10.99 sec and a bridge 837.31 m long in 45.98 sec. What is the length of the train?

- (i) 263.99 m (ii) 262.99 m (iii) 260.99 m (iv) 261.99 m (v) 264.99 m

16. A train crosses a telegraph post in 13.66 sec and a bridge 1043.64 m long in 62.36 sec. What is the speed of the train?

- (i) 23.43 m/sec (ii) 19.43 m/sec (iii) 22.43 m/sec (iv) 21.43 m/sec (v) 20.43 m/sec

A can do a work in 9 days. With the help of B, A can do the same work in

17. $2\frac{1}{4}$ days. In how many days can B alone do the work?

(i) 4 days (ii) 1 day (iii) 2 days (iv) 3 days (v) 5 days

Due to a leak at the bottom, pipe Y takes $11\frac{1}{4}$ hr to fill the tank.

18. The leak alone can empty the full tank in 45 hr.
In what time can pipe Y alone fill the tank when the leak is closed?

(i) 12 hr (ii) 8 hr (iii) 10 hr (iv) 9 hr (v) 6 hr

A, B and C together can do a work in $1\frac{7}{13}$ days.

19. If A and C can do the work in 4 days and 5 days respectively,
in how many days can B alone do the work?

(i) 5 days (ii) 4 days (iii) 7 days (iv) 6 days (v) 3 days

A and B together can do a piece of work in $4\frac{2}{19}$ hr.

20. They work together for 2 hr and then A leaves.

B completes the remaining work in $3\frac{1}{13}$ hr.

In how much time can each of them do the work separately?

(i) (14 hr, 6 hr) (ii) (13 hr, 5 hr) (iii) (13 hr, 7 hr) (iv) (13 hr, 6 hr) (v) (12 hr, 6 hr)

A and B together can do a piece of work in $4\frac{17}{22}$ days.

21. They work together for 2 days and then A leaves.

B completes the remaining work in $8\frac{5}{7}$ days.

In how much time can each of them do the work separately?

(i) (6 days, 15 days) (ii) (7 days, 15 days) (iii) (7 days, 16 days) (iv) (7 days, 14 days) (v) (8 days, 15 days)

A can do $\frac{1}{6}$ of a work in 1 hr.

22. He works for 3 hr when B joins him.

They work together and complete the work in $1\frac{16}{17}$ hr.

In how much time, B alone can do the work?

(i) 8 hr (ii) 12 hr (iii) 11 hr (iv) 14 hr (v) 10 hr

23. What number must be added to each term of the ratio 54:72 to make it 16:17?

(i) 236 (ii) 232 (iii) 234 (iv) 233 (v) 235

24. A ratio is equal to 1 : 5. If its antecedent is 1911, what is its consequent?

(i) 9554 (ii) 9557 (iii) 9552 (iv) 9555 (v) 9556

25. A ratio is equal to 5 : 1. If its consequent is 840, what is its antecedent?

(i) 4200 (ii) 4201 (iii) 4199 (iv) 4197 (v) 4202

26. Two numbers are in the ratio 5 : 10. If 16 is added to each number, the ratio becomes 7 : 12. Find the numbers.
(i) 50:100 (ii) 30:60 (iii) 35:70 (iv) 40:80 (v) 45:90
- The ratio of two numbers is
27. 1:5
and their LCM is 60. Find the numbers.
(i) 10:50 (ii) 13:65 (iii) 12:60 (iv) 11:55 (v) 14:70
28. The ages of A and B are in the ratio 9 : 5. 8 years hence, their ages will be in the ratio 5 : 3. Find their present ages.
(i) 90:50 (ii) 72:40 (iii) 54:30 (iv) 63:35
29. The ages of A and B are in the ratio 6 : 7. 5 years ago, their ages were in the ratio 5 : 6. Find their present ages.
(i) 24:28 (ii) 30:35 (iii) 18:21 (iv) 42:49
30. The ratio of males to females in a committee of 144 members is 1 : 7. How many more ladies should be added to the committee so that the ratio of males to females is 3 : 31?
(i) 61 (ii) 59 (iii) 60 (iv) 57 (v) 62

Assignment Key

1) (iii)	2) (ii)	3) (v)	4) (ii)	5) (iii)	6) (ii)
7) (iv)	8) (iv)	9) (iii)	10) (v)	11) (iv)	12) (i)
13) (v)	14) (ii)	15) (ii)	16) (iv)	17) (iv)	18) (iv)
19) (i)	20) (iv)	21) (ii)	22) (iii)	23) (iii)	24) (iv)
25) (i)	26) (iv)	27) (iii)	28) (ii)	29) (ii)	30) (iii)