

1. The product of two rational numbers is -9. If one of the number is -12. Find the other number.
2. By what rational number should we multiply $-15/56$ to get $-5/7$.
3. From the rope of 11 m long, two pieces of length $2(3/5)$ m and $3(3/10)$ m are cut off. What is the length of the remaining rope.
4. $2/3$ of the number is 20 less than the original number. Find the number.
5. Two numbers are in the ratio 8: 3. If the sum of the number is 143. Find the number.
6. Simplify i) $8x + 3 = 27 + 2x$ ii) $2z-1 = 14-z$ iii) $(8x-3) / 3x = 2$ iv) $9x + 5 = 4(x-2) + 8$ v) $9x/(7-6x) = 15$
7. Prove that sum of the angles of the quadrilateral is 360.
8. The three angles of the quadrilateral are 76, 54, 108. Find the measure of the fourth angle.
9. A quadrilateral has three angles as acute angles whose measure is 75. Find the measure of the fourth angle.
10. Find the smallest number by which 2560 must be multiplied so that the product is the perfect cube
11. Find the cube roots of i) 343 ii) 4096 iii) 3375 iv) 8000 v) 9261 vi) 4096 vii) 3375 viii) 729
12. Find the smallest number by which 1323 must be multiplied so that the product is the perfect cube.
13. Find square root using long division method, i) 7056 ii) 17956 iii) 9025 iv) 576 v) 19600
14. Find the least number by which 2925 must be multiplied so that the product is the perfect cube. Also find the square root of the perfect square obtained.
15. The students arranged for picnic where every student contributed as many rupees as the number of students. If the total contribution is 1156. Find the strength of the class.
16. The area of the square is 60025 unit sq. Find the perimeter.
17. If 35 men can reap a field in 8 days, in how many days can 20 men can reap a field.
18. 6 cows can graze a field in 28 days. How long would 14 cows take to graze the same field.
19. A truck covers a distance of 510 km in 34 liters of diesel. How much distance would it cover in 20 liters of diesel.
20. Find the amount and the compound interest on Rs 8000 for 1 year at 10 % pa compounded half yearly.
21. Find the amount and the compound interest on Rs 31250 for $3/2$ year at 8 % pa compounded half yearly.
22. Find the amount and the compound interest on Rs 10000 for 2 years at 11 % pa compounded annually.
23. Find the difference between simple interest and the compound interest if principal is 8000 Rs for 2 years at 15 % pa.
24. Find the difference between simple interest and the compound interest on 5000 Rs for 2 years at 9 % pa.
25. Express 36% as a ratio. 26. What percent of 120 is 90.
26. Factorize i) $x^2 + 5x + 6$ ii) $x^2 + 15x + 56$ iii) $p^2 + 6p + 8$ iv) $q^2 - 10q + 21$ v) $x^2 + 13x + 40$
27. The measure of two adjacent angles of the parallelogram are in the ratio 3:2. Find the measure of the angles.
28. Two adjacent angles of the parallelogram have equal measure. Find the measure of each of the angles of the parallelogram.
29. Explain how a square is a a) rhombus b) rectangle
30. Prove that sum of all angles of the quadrilateral is 360.
31. The diagonals of the rhombus are 7.5 cm and 12 cm. Find its area.
32. The diagonals of the quadrilateral shaped field is 24 cm and the perpendicular dropped on it from the remaining opposite vertices are 8 cm and 13 m. Find the area of the field.
33. The area of the trapezium is 34 cm^2 and the length of one of its parallel sides is 10 cm and its height is 4 cm. Find the length of other parallel sides.
34. Find the area of the trapezium if its parallel sides are 1 m and 1.2 m and perpendicular distance between them is .8
35. The area of the trapezium shaped field is 480 cm^2 , the distance between two parallel sides is 15 m and one of its parallel sides are 20 m . Find the other parallel sides.
36. Subtract, $4a - 7ab + 3b + 12$ from $12a - 9ab + 5b - 3$