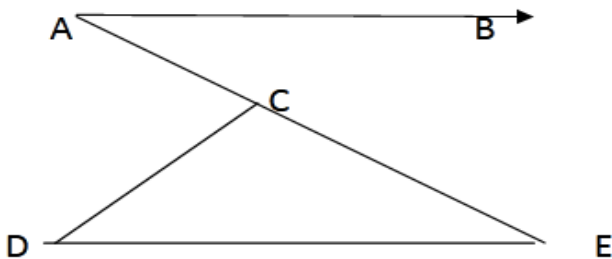


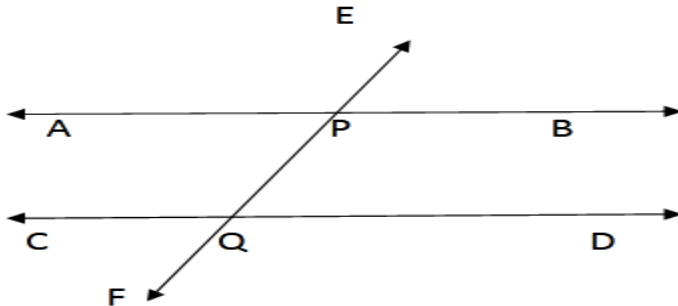


Chapter 10: Parallel Lines

1. Draw a line segment $AB=6\text{cm}$ and divide it internally into six parts.
2. Draw a line segment of length 7.7 cm and divide it internally in the ratio $3:4$.
3. Draw a line segment AB of length 6cm and find a point P on it such that $AP: PB =1:3$. Measure AP and PB .
4. Two parallel lines are intersected by a transversal. If measure of one of the angles so formed is 73° , then find the measure of its co interior angle, corresponding angle and alternate interior angle.
5. In the given figure, if $AB\parallel DE$, $\angle BAC=35^\circ$ and $\angle CDE=53^\circ$, find $\angle DCE$



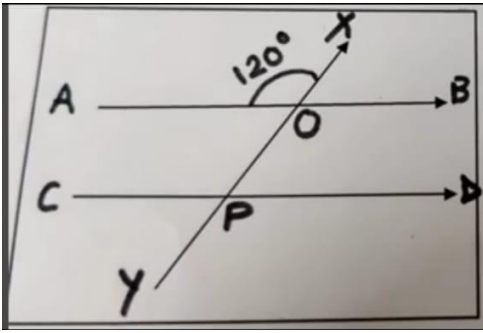
6. In the figure if $\angle EPB = (7X -20)^\circ$ and $\angle PQD = (3X +20)^\circ$, for what value of x will the lines AB and CD be parallel to each other.



7. A farmer has a rectangular garden as shown in the picture. He has different types of trees, plants and flower plants in his garden. Two mango trees A and B are tied by a rope of length 10m . Similarly, two Ashok trees at the same distance of 10m as shown at C and D . X and Y are two trees of guava are planted in the garden. If X and Y tied by a rope which intersects the two parallel ropes at O and P respectively. AB subtends angle $AOX = 120^\circ$

Answer the questions based on above case study: -

- (a) Find angle CPX and angle YPD .
- (b) If angle $BOY = 2x +5$ then find the value of x .



Chapter 5: Profit, Loss & Discount

1. Manjit bought an Iron safe for Rs. 12160 and paid Rs. 340 for its transportation. Then, he sold it for Rs. 12875. Find his gain per cent.
2. By selling 130 cassettes, a man gains an amount equal to the selling price of 5 cassettes. Find the gain per cent.
3. After allowing a discount of 8% on a book, it sold for Rs.828. Find the marked price of the book.
4. Rahul Purchased a TV at Rs.23,000 including GST. If the cost price of the TV was Rs.20,000, how much GST (in %) has he paid.
5. By selling a flower pot for Rs 322, a man gains 15%. At what price should he sell it to gain 20%.
6. If the cost price of 12 pens is equal to the selling price of 16 pens. Find the loss per cent.
7. A dealer purchased a Washing Machine for Rs 7660. He allows a discount of 12% on its Marked Price and stills gain 10%. Find the Marked Price of the machine.
8. Nutrition for children is based on the same principles as nutrition for adults. Everyone needs the same types of nutrients - such as vitamins, minerals, carbohydrates, protein and fat. Children have greater needs for energy, water and oxygen as they go through growth processes. Balance diet of a child should contain 10% of proteins, 25% of fats, 63% of carbohydrates and rest minerals and vitamins. If a child needs 2600 calories in his food daily. Give answer of the following question based on the above case study.



- (a) Find in calories the amount of each of nutrients in a diet.
- (b) Find the amount of minerals and vitamins in calories.

Chapter 2: Cube & Cube Roots

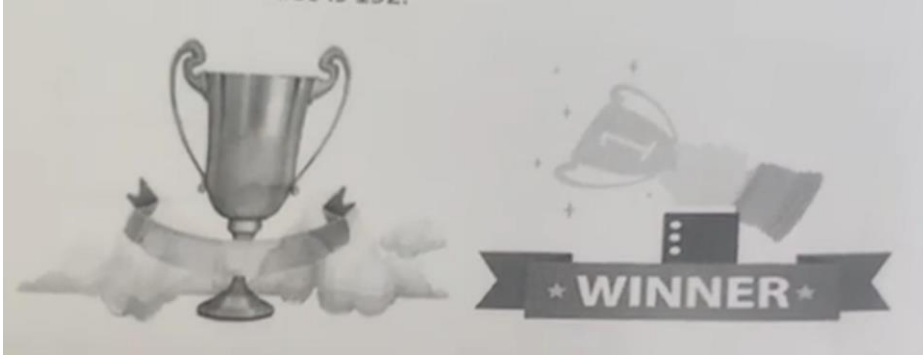
Evaluate:

- (a) $\sqrt[3]{512}$
- (b) $\sqrt[3]{(125 \times 64)}$
- (c) $\sqrt[3]{\frac{64}{343}}$

(d) $-\sqrt[3]{\frac{512}{729}}$

(e) $(1\frac{3}{10})^3$

- 1) Find the smallest number by which 1323 must be multiplied so that the product is a perfect cube.
- 2) Find the smallest number by which 1600 must be divided so that the quotient is a perfect cube.
- 3) A school decided to award prizes to students for three values- discipline, cleanliness and regularity in attendance. The number of students getting prizes in the three categories are in the ratio 2:3:4. If product of the ratios is 192.



Based on the above case study, Give answers of the following questions:

- (a) Find the number of students getting prizes of each value.
- (b) If the value of each prize is Rs. 200, then find the total amount of prizes.

Chapter 13: Introduction to Graphs

1. Write the abscissa of each of the following points.
(a) (0,5) (b) (3,7) (c) (-2,4) (d) (6,-3)
2. Write the ordinate of each of the following points.
(a) (4,0) (b) (5,2) (c) (1,-4) (d) (-10,-7)
3. Plot each of the following points on a graph paper.
(a) A (4,3) (b) B (-2,5) (c) C (0,4) (d) D (7,0)

Vanmahotsav Week or Forest Festival is celebrated in July every year in our School. The aim of this festival is to create awareness about forests, especially trees among students. Many students take part in the celebration of this festival. Plantation of trees is a important part of this festival. Four students of Class VIII planted trees in the given position as shown in the graph.



Answer the following questions based on the above case study:

- (a) Write the coordinates of the planted trees P, Q, R and S.

(b) Write the distance of point P from X-axis and the distance of point R from Y-axis.

Chapter 9: Linear Equation in One Variable

Answer the following questions.

1. Solve: $5x - 9 = 8$
2. What should be subtracted from 3 to get -4 ?
3. Find the value of x which satisfies the equation: $\frac{2x+1}{x+3} = 1$
4. Solve: $\frac{x}{2} - \frac{1}{5} = \frac{x}{3} + \frac{1}{4}$
5. The ages of Sonu and Monu are in the ratio 7: 5. Ten years hence, the ratio of their ages will be 9: 7. Find their present ages.
6. The sum of the digits of a two-digit number is 8. The number obtained by interchanging the digits exceeds the given number by 18. Find the given number.
7. Solve the equation $\frac{7-x}{5x+1} = 3$ and verify your answer.
8. The numerator of a fraction is 2 less than the denominator. If one is added to its denominator, it becomes $\frac{1}{2}$. Find the rational number.
9. A race-boat covers a distance of 60 km downstream in one and a half hours. It covers this distance upstream in 2 hours. The speed of the race-boat in still water is 35 km/hr. Find the speed of the stream.
10. Soni and Moni are going to market purchasing some toys for children. Soni has Rs. 84 in her purse while Moni has Rs. 85. Soni has 36 coins of Rs. 2 and Rs. 5. Moni has Rs. 1 and Rs. 2 coins and the ratio in her coins is 5:6. Now give the answers of the following questions based on the above situation:



- (a) Find the equation of finding the number of coins in Soni's purse.
- (b) Find the equation of finding the number of coins in Moni's purse.