

Subject: Maths

Class: 8th

Topic: Holiday Assignment

Compulsory for all:

Solve:

1. $\frac{3}{7} + \left(\frac{-6}{11}\right) + \left(\frac{-8}{21}\right) + \left(\frac{5}{22}\right)$

2. $\frac{-4}{5} \times \frac{3}{7} \times \frac{15}{16} \times \left(\frac{-14}{9}\right)$

3. $\frac{-2}{3} \times \frac{3}{5} + \frac{5}{2} - \frac{3}{5} \times \frac{1}{6}$

4. $\frac{2}{7} + \frac{3}{14} - \frac{5}{2} + \frac{1}{7}$

5. Find any ten rational numbers between $\frac{-5}{6}$ and $\frac{5}{8}$.

6. Find a rational number between $\frac{1}{4}$ and $\frac{1}{2}$.

7. Write the reciprocal of following:

a. $\frac{-11}{-12}$

b. $\frac{2}{13} \times \frac{39}{8}$

c. $\frac{-4}{7}$

d. $\frac{21}{19}$

8. Multiple $\frac{6}{7}$ by reciprocal of $\frac{-12}{21}$.

Find the solution of following equation:

9. $\frac{15}{4} - 7x = 9$

10. $x - 2 = 7$

11. $\frac{t}{5} = 10$

12. $\frac{2x}{3} = 18$

13. $7.5 = \frac{2.5y}{5}$

14. $3.5x - 9 = 16$

15. $3y + 2.5 = 8.5$

16. $\frac{12}{5} - 2x = 4$

17. $2x - 1 = 14 - x$

18. $8x + 4 = 3(x - 1) + 7$

19. $x = \frac{4}{5}(x + 10)$

20. $\frac{2x}{3} + 1 = \frac{7x}{15} + 3$

21. $\frac{5x}{2} - 2 = \frac{4x}{3} + 4$

22. $\frac{n}{2} - \frac{3n}{4} + \frac{5n}{6} = 21$

23. $x + 7 - \frac{8x}{3} = \frac{17}{6} - \frac{5x}{2}$

24. The denominator of a rational number is greater than its numerator by 8.

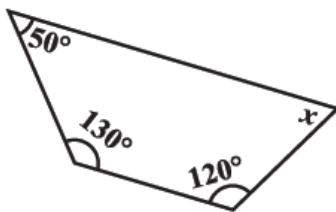
If the numerator is increased by 17 and the denominator is decreased by 1, the number obtained is $\frac{3}{2}$. Find the rational number.

25. Find the measure of each exterior angle of a regular polygon of

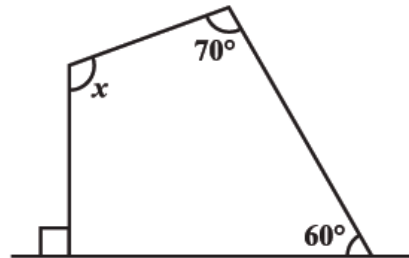
(i) 9 sides (ii) 15 sides

26. How many sides does a regular polygon have if the measure of an exterior angle is 24° ?

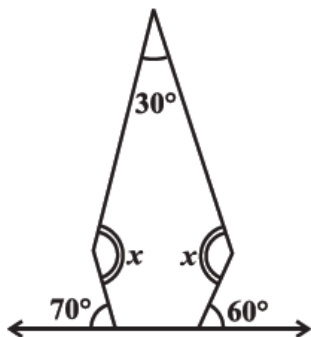
27. Find the angle measure x in the following figures.



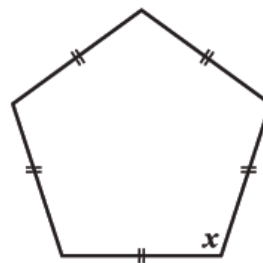
(a)



(b)

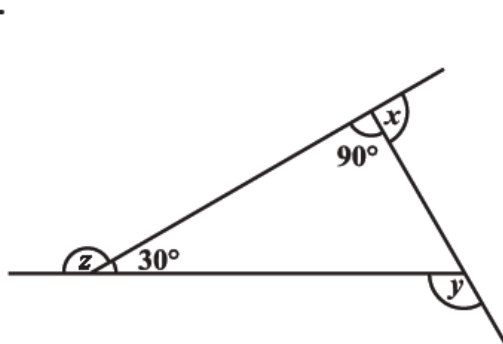


(c)

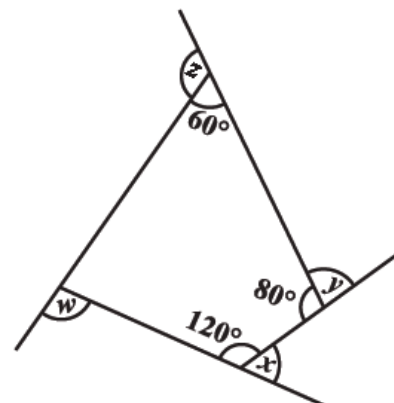


(d)

28. Solve:



(a) Find $x + y + z$



(b) Find $x + y + z + w$

29. Find the number of sides of a regular polygon whose each exterior angle has a measure of 45° .
30. Find the perimeter of the parallelogram PQRS
31. In Fig 3.26 BEST is a parallelogram. Find the values x , y and z .
32. In a parallelogram RING, (Fig 3.28) if $m\angle R = 70^\circ$, find all the other angles.

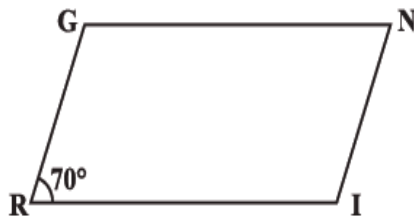


Fig 3.28

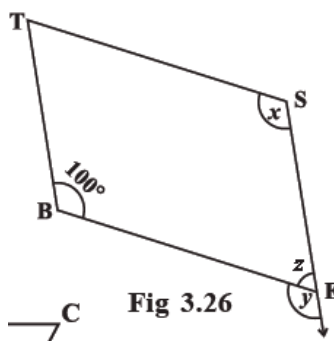
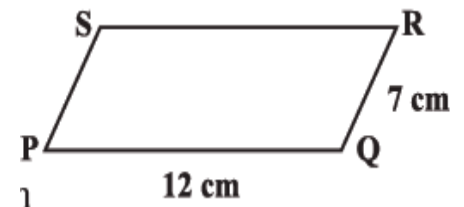


Fig 3.26



33. The measures of two adjacent angles of a parallelogram are in the ratio 3 : 2. Find the measure of each of the angles of the parallelogram.

34. Two adjacent angles of a parallelogram have equal measure. Find the measure of each of the angles of the parallelogram.

35. RICE is a rhombus (Fig 3.36). Find x , y , z .

36. RENT is a rectangle (Fig 3.41). Its diagonals meet at O. Find x , if $OR = 2x + 4$ and $OT = 3x + 1$.

37. The present age of Sahil's mother is three times the present age of Sahil. After 5 years their ages will add to 66 years. Find their present ages.

38. The sum of three consecutive multiples of 11 is 363. Find these multiples.

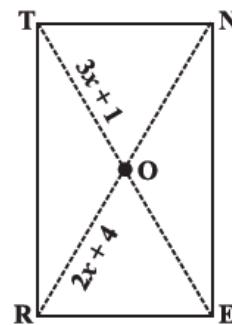


Fig 3.41

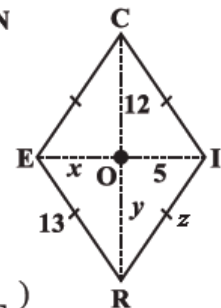


Fig 3.36

39. Deveshi has a total of Rs. 590 as currency notes in the denominations of Rs. 50, Rs. 20 and Rs. 10. The ratio of the number of Rs. 50 notes and Rs. 20 notes is 3:5. If she has a total of 25 notes, how many notes of each denomination she has?

40. The number of boys and girls in a class are in the ratio 7:5. The number of boys is 8 more than the number of girls. What is the total class strength?

41. Arjun is twice as old as Shriya. Five years ago his age was three times Shriya's age. Find their present ages.

42. A grandfather is ten times older than his granddaughter. He is also 54 years older than her. Find their present ages.

43. Present ages of Anu and Raj are in the ratio 4:5. Eight years from now the ratio of their ages will be 5:6. Find their present ages.
44. Lakshmi is a cashier in a bank. She has currency notes of denominations Rs. 100, Rs. 50 and Rs. 10, respectively. The ratio of the number of these notes is 2:3:5. The total cash with Lakshmi is Rs. 4,00,000. How many notes of each denomination does she have?
45. I have a total of Rs. 300 in coins of denomination Rs. 1, Rs. 2 and Rs. 5. The number of Rs. 2 coins is 3 times the number of Rs. 5 coins. The total number of coins is 160. How many coins of each denomination are with me?

Activity: (Total three activities)

Compulsory for all:

1. Prepare a chart on drawing sheet to plot following points and show the shape form by joining them as per instruction given below:

Coordinates: A(1, 1), B(3, 1), C(5, 1), D(7, 1), E(17, 1), F(3, 5), G((5, 5), H(1, 9), I(7, 9), J(4, 11), K(14, 11), L(17, 9), M(9, 5), N(11, 5), O(11, 7), P(9, 7) Q(13, 5), R(15, 5), S(15, 7), T(13, 7)

Join points: AE, AH, HJ, DI, EL, HJ, IJ, JK, KL, MN, NO, OP, MP, QR, RS, ST, QT

(Reference Chapter-15 NCERT: Introduction to Graph)

Do any two:

2. Make any two different 3D shapes from following using cardboard cutting:

- | | |
|-----------------------|---------------------|
| a) Cube | b) Cuboid |
| c) Cylinder | d) Triangular Prism |
| e) Rectangular Prism | f) Pentagon Prism |
| g) Triangular Pyramid | h) Square Pyramid |

(Reference Chapter-10 NCERT: Visualisation of solid shapes)

3. Write any four formulas with respective diagram on chart sheet:

- | | |
|----------------------------------|-----------------------------------|
| a) Area of rectangle | b) Perimeter of rectangle |
| c) Area of square | d) Perimeter of square |
| e) Area of Parallelogram | f) Area of equilateral triangle |
| g) Area of trapezium | h) Total surface area of cube |
| i) Total surface area of cuboids | j) Total surface area of cylinder |

