

Note: Solve Assignment in separate notebook.

Assignment

- Multiply $\frac{3}{7} by \frac{-4}{5}$.
- $(17 \times 12)^{-1} = 17^{-1} \times \dots \dots \dots$
- Find: $(x + y) \div (x - y)$ if, $x = \frac{2}{3}$, $y = \frac{3}{2}$.
- Divide the sum of $\frac{65}{12}$ and $\frac{12}{7}$ by their difference.
- After 12 years I shall be 3 times as old as I was 4 years ago. Find my present age. (12 years)
- Three prizes are to be distributed in a quiz contest. The value of second prize is five sixths the value of the first prize and the value of third prize is four fifths that of second prize. If the total value of three prizes is Rs. 150, find the value of each prize. (Rs. 60, 50, 40)
- Express $\frac{-48}{60}$ as a rational number with denominator 5.
- Solve: $15(y - 4) - 2(y - 9) + 5(y + 6) = 0$
- The width of a rectangle is two third its length. If the perimeter is 180 meters. Find dimensions of the rectangle.
- What number should be added to -1 so as to get $\frac{5}{7}$.
- Solve: $\frac{2}{5x} - \frac{5}{3x} = \frac{1}{15}$.
- The interior angle of a regular polygon is 156° . Find the number of sides of the polygon. (15)
- In a parallelogram ABCD, $D = 115^\circ$, determine the measure of A and B.
- Two adjacent angles of a parallelogram are as 2:3. Find the measure of all the angles.
- Two opposite angles of a parallelogram are $(3x - 2)^\circ$ and $(50 - x)^\circ$. Find the measure of each angle of the parallelogram.
- Simplify: $\frac{-3}{11} \times \frac{-5}{6} \times \frac{22}{9} \times \frac{-9}{5}$
- Simplify: $\frac{-2}{3} + \frac{5}{9} - \frac{-7}{6}$
- The sum of the digits of a two-digit number is 7. The number obtained by interchanging the digits exceeds the original number by 27. Find the number. (27)
- Sushma is now 15 years older than Vijay but in 3 more years she will be 8 times as old as Vijay was 3 years ago. How old are they now? (21 years, 6 years)
- The product of two numbers is $\frac{5}{9}$. If one of the numbers is $\frac{-35}{24}$. Find the other. ($\frac{-8}{21}$)
- Find 7 rational numbers between $\frac{1}{3}$ and $\frac{1}{2}$.
- Evaluate: $(\frac{5}{9} \div \frac{15}{36}) \div (-\frac{5}{6})$
- Two angles of a quadrilateral are of measure 50° each and the other two angles are equal. What is the measure of each of these two angles. (130°)
- A quadrilateral has all four angles of same measure, what is the measure of each angle?
- The perimeter of a parallelogram is 180 cm. One of its sides is greater than the other by 30 cm. find the length of the sides of the parallelogram.
- Use distributivity of multiplication over addition to simplify: $\frac{3}{5} \times (\frac{35}{24} + \frac{10}{1})$
- The diagonals of a rhombus are 12 cm and 16 cm, find the length of each side. (10cm)
- 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. ($\frac{13}{21}$)
- A boy gets 3 marks for each correct sum and loses 2 marks for each incorrect sum. He does 24 sums and obtains 37 marks. The number of correct sums were? (17)
- Find five rational numbers between $\frac{-3}{2}$ and $\frac{5}{3}$.
- If the angles of a quadrilateral are x° , $(2x + 13)^\circ$, $(3x + 10)^\circ$, $(x - 6)^\circ$, find x.
- The perimeter of a parallelogram is 150 cm. one of its sides is greater than the other by 25 cm. find the lengths of all the sides of parallelogram. (25cm, 50cm, 25cm, 50cm)
- Solve: $\frac{3x+2}{4x+11} = \frac{4}{7}$
- Simplify: $(\frac{-7}{18} \times \frac{15}{-7}) - (1 \times \frac{1}{4}) + (\frac{1}{2} \times \frac{1}{4})$ ($\frac{17}{24}$)
- The cost of $2\frac{1}{3}$ meters of cloth is Rs $75\frac{1}{4}$. Find the cost of cloth per meter.

36. If 24 trousers of equal size can be prepared in 54 meters of cloth, what length of cloth is required for each trouser?
37. Construct a quadrilateral ABCD in which AB = 3.6 cm, BC = 5.5 cm, CD = 4.9 cm, DA = 5.3 cm and AC = 7.2 cm.
38. Is it possible to construct a quadrilateral ABCD in which AB = 3 cm, BC = 4 cm, CD = 5.5 cm, DA = 6 cm and BD = 9 cm? If not give reason.
39. A two digit number whose one's digit is x and ten's digit is y is.....
40. Kiran is 24 years older than Rakesh. 10 years back Kiran's age was five times the age of Rakesh. Find their ages. (Kiran's age: 40 years, Rakesh's age: 16 years)
41. Solve: $\frac{1}{6}(4y + 5) - \frac{2}{3}(2y + 7) = \frac{3}{2}$
42. If one angle of a parallelogram is 70° . Find all other angles.
43. What is the measure of each angle of a regular hexagon?
44. Write any three rational numbers between -2 and 0 .
45. If three angles of a quadrilateral are 50° , 90° and 70° . Find the fourth angle.
46. My age is 4 times the difference of my age after four years and my age three years back. How old am I? (28 years)
47. A man sold an article for Rs 495 and gained 10% on it. Find the cost price of the article.
48. By what number should we multiply $\frac{-8}{13}$ so that the product may be 24?
49. Verify the property: $x \times (y + z) = x \times y + x \times z$ by taking $x = \frac{-3}{4}$, $y = \frac{-5}{2}$, $z = \frac{7}{6}$
50. Evaluate: $\frac{6}{7} - 2 + \frac{-7}{9} + \frac{19}{21}$

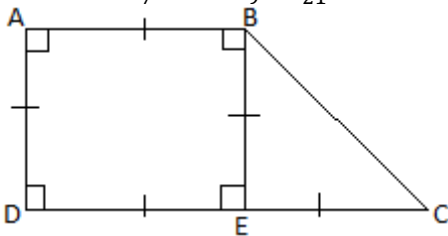


fig. 1

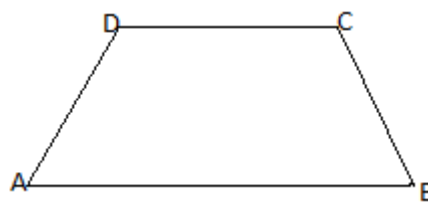


fig. 2

51. In fig 1, ABCD is a trapezium and ABED is a square. If BE = EC, find: (a) angle BAE (b) angle ABC (c) What shape is the figure ABCE? (Hint: join A and E) [(a) 45° (b) 135° (c) parallelogram]
52. In fig 2, ABCD is a trapezium in which $AB \parallel DC$. If angle A = angle B = 40° , what are the measures of the other two angles?
53. Sum of the digits of a two digit number is 9. The number obtained by interchanging the digits exceeds the given number by 27. Find the given number. (36)
54. A car travelling at 60 km/hr left Dehradun at 3 P.M. One hour later, another car travelling at 80 km/hr started over the same road to overtake the first. How long must the second car travel to overtake the first car? (3 hours)
55. If $\frac{b}{a}x = \frac{a}{b}$, then $x = ?$
56. Solve: $\frac{x+2}{3} - \frac{x+1}{5} = \frac{x-3}{4} - 4$
57. Represent $\frac{5}{3}$ and $\frac{-5}{3}$ on number line.
58. Name the property: (i) $\frac{-11}{16} \times \frac{16}{-11} = 1$ (ii) $\frac{-5}{16} \times \frac{8}{15} = \frac{8}{15} \times \frac{-5}{16}$
59. Evaluate: $\frac{3}{4} + \left(-\frac{3}{5}\right) + \left(-\frac{2}{3}\right) + \frac{5}{8} + \left(-\frac{4}{15}\right) + \left(\frac{-19}{120}\right)$
60. Construct a parallelogram ABCD where AB = 3.6 cm, BC = 4.2 cm and AC = 6.5 cm.

Activity: Do activity 1 to 7 in practical file from your Lab manual

Project work: Do all the project work on chart paper

Roll no. 1 to 8: Show the angle sum property of quadrilateral by paper cutting

Roll no. 9 to 16: Write all the properties of special quadrilaterals with figures.

Roll no.: 17 to 24: Draw or paste the picture of any Indian mathematician and describe their contribution in the field of maths

Roll no.: 25 to 32: Draw or paste the picture of any international mathematician and describe their contribution in the field of maths

Roll no. 33 to 40: Write all the properties of rational numbers under the operations of addition and subtraction.

Roll no. 41 to 46: Write all the properties of rational numbers under the operations of multiplication and division.

REVISE: CHAP-1,2,3,4

