Example 17: Solve $5x - 2\,(2x - 7) = 2\,(3x - 1) + \dfrac{7}{2}$

Solve the following linear equ

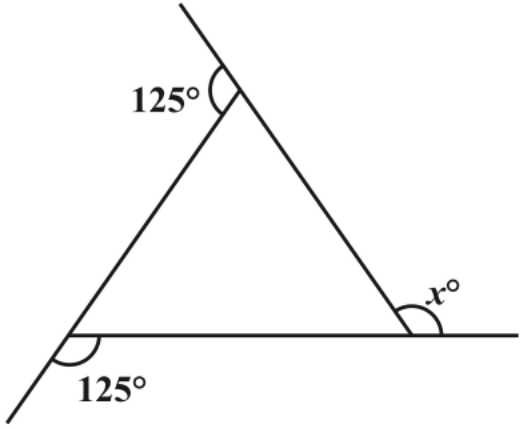
1. $\frac{x}{2}-\frac{1}{5}=\frac{x}{3}+\frac{1}{4}$

Example 4: A train is moving at a uniform speed of 75 km/hour.

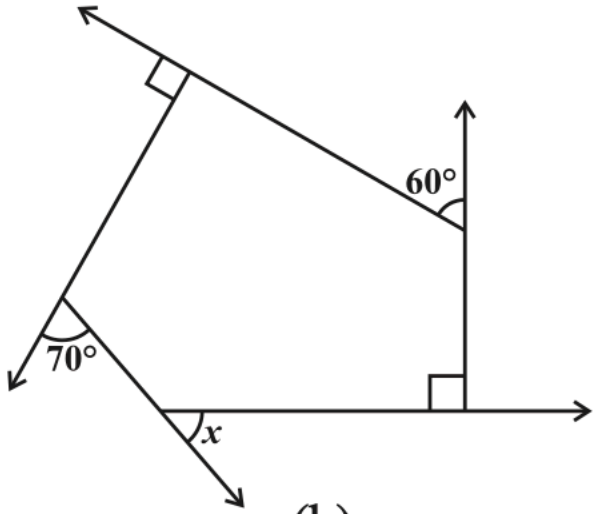
(i) How far will it travel in 20 minutes?

(ii) Find the time required to cover a distance of 250 km.

1. Find x in the following figures.



(a)



(b)

47. If the sum of two consecutive numbers is 93 and one of them is x, then the other number is $93 - x$.

20. How many diagonals does a hexagon have?

(a) 9 (b) 8 (c) 2 (d) 6

21. If the adjacent sides of a parallelogram are equal then parallelogram is a

(a) rectangle (b) trapezium (c) rhombus (d) square

22. If the diagonals of a quadrilateral are equal and bisect each other, then the quadrilateral is a

(a) rhombus (b) rectangle (c) square (d) parallelogram

23. The sum of all exterior angles of a triangle is

(a) 180° (b) 360° (c) 540° (d) 720°

24. Which of the following is an equiangular and equilateral polygon?

(a) Square (b) Rectangle (c) Rhombus (d) Right triangle

25. Which one has all the properties of a kite and a parallelogram?

(a) Trapezium (b) Rhombus (c) Rectangle (d) Parallelogram

26. The angles of a quadrilateral are in the ratio 1 : 2 : 3 : 4. The smallest angle is

(a) 72° (b) 144° (c) 36° (d) 18°

39. In case of inverse proportion, $\frac{a_2}{\_\_} = \frac{b_2}{\_\_}$

40. If the area occupied by 15 postal stamps is 60 cm^2, then the area occupied by 120 such postal stamps will be _____.

41. If 45 persons can complete a work in 20 days, then the time taken by 75 persons will be _____ hours.

42. Devangi travels 50 m distance in 75 steps, then the distance travelled in 375 steps is _____ km.