

REVISION WORKSHEET  
TERM-2, 2019-2020

NAME: .....

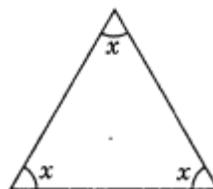
DATE :

CLASS & SECTION: VII

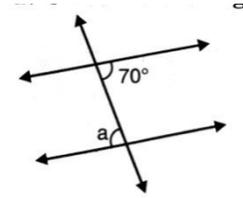
SUBJECT: MATHEMATICS

**SECTION - A**

- If  $2t + 3 = 4$ , then  $t =$  \_\_\_\_\_  
(a) 7 (b)  $\frac{7}{2}$  (c)  $\frac{-7}{2}$  (d)  $\frac{1}{2}$
- If  $\triangle ART \cong \triangle PEN$ , then  $RT =$  \_\_\_\_\_ and  $\angle A =$  \_\_\_\_\_  
(a)  $EN, \angle P$  (b)  $\angle P, EN$  (c)  $PE, \angle T$  (d)  $PN, \angle N$
- Express the algebraic equation as a statement.  $\frac{x}{3} + 1 = -4$ .
- Which of the following is a solution of  $2x + 9 = 5$ ?  
(a) 2 (b) -2 (c) 0 (d) 1
- The supplementary angle for  $50^\circ$  is  
(a)  $50^\circ$  (b)  $40^\circ$  (c)  $130^\circ$  (d)  $90^\circ$
- The angle which is equal to its complement is \_\_\_\_\_ .
- If two angles are supplementary, then the sum of their measures is \_\_\_\_\_ .
- If two lines intersect at a point, then the vertically opposite angles are \_\_\_\_\_ .
- What is the value of  $\frac{2}{3}$  of Rs. 180?
- If one dozen bangles cost Rs. 96, what is the cost of 10 bangles?
- Out of 45 students, 9 students are absent. The percentage of students present is \_\_\_\_\_ .  
(a) 20% (b) 36% (c) 0.36% (d) 40%
- What per cent of 84 is 14?
- The excise duty on a certain item has been reduced to Rs 760 from Rs 950. Find the reduction per cent in the excise duty on that item.
- Find the value of  $x$  in the adjoining figure:



15. In the given figure, parallel lines are cut by a transversal. Find the angle given as 'a'. Also mention the name of the pair of given angles.



16. The perimeter of an equilateral triangle is 15cm. Find the length of each side.

17. The probability of sure event is \_\_\_\_\_ .

18. When a die is thrown, the probability of getting a number less than 7 is \_\_\_\_\_ .

19. The probability of an event which is impossible to happen is \_\_\_\_\_ .

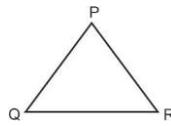
20. The probability of getting a sum of 14 of the numbers on both dice when two dice are thrown simultaneously is \_\_\_\_\_ .

21. How many altitudes can a triangle have? Draw a figure to show your answer.

22. In the given triangle  $\Delta PQR$ , name:

(i) the side opposite to  $\angle P$

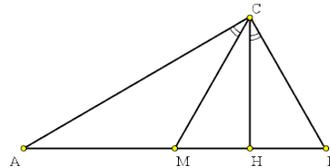
(ii) the angle opposite to side PQ



23. In  $\Delta ABC$ , M is the midpoint of AB. Then

(i) CM is \_\_\_\_\_ .

(ii) CH is \_\_\_\_\_ .



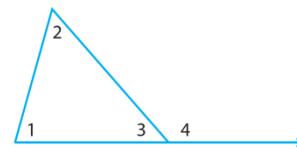
24. Which one is not true for the given figure?

(a)  $\angle 1 + \angle 2 = \angle 4$

(b)  $\angle 1 + \angle 2 + \angle 3 = 180^\circ$

(c)  $\angle 2 + \angle 3 = \angle 4$

(d)  $\angle 3 + \angle 4 = 180^\circ$



25. The length of two sides of a triangle are 6cm and 8cm. Between which two numbers can the length of the third side fall?

26. Which is the longest side in the triangle PQR right angled at P?

27. If  $\Delta ABC \cong \Delta PQR$ , write all the corresponding congruent parts of the triangles.

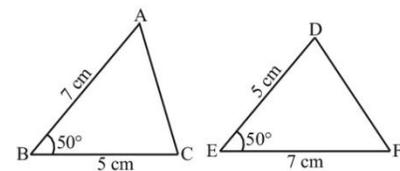
28. By which congruence criterion, the two given triangles are congruent?

(a) SSS

(b) SAS

(c) ASA

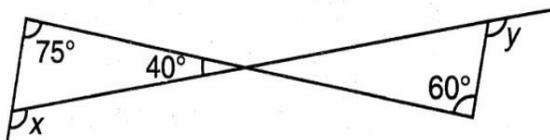
(d) RHS



29. The circumference of a circle is  $4\pi \text{ cm}^2$ . Find its radius.

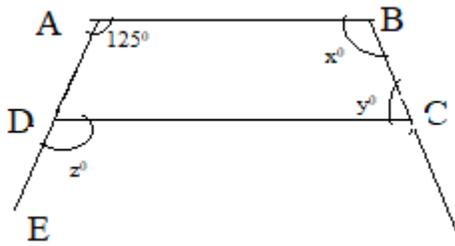
30. A wire is bent to form a square of side 22cm. If it is rebent to form a circle, find the radius of such a circle.

29. Find the profit or loss percentage if an article costing Rs.1500 is sold for Rs.1200.
30. When a fair die is thrown, what is the probability of getting a number greater than 4?
31. Write the following statements in the form of equation and solve it:
- The sum of three times  $x$  and 11 is 32.
  - If you subtract 5 from 6 times a number, you get 7.
  - One fourth of  $m$  is 3 more than 7.
  - One third of a number plus 5 is 8.
32. Raju's father's age is 5 years more than three times Raju's age. Raju's father is 44 years old. Find Raju's age.
33. Solve the following equations:
- $4(m+3)=18$
  - $2y+\frac{5}{2}=\frac{37}{2}$
  - $4+5(p-1)=34$
34. The perimeter of a rectangle is 40m. The length of the rectangle is 4 less than 5 times its breadth. Find the length of the rectangle.
35. A man travelled two fifth of his journey by train, one-third by bus, one fourth by car and remaining 3km on foot. What is the length of his total journey.
36. If the cost price of 10 chairs be equal to the selling price of 16 chairs, find the gain or loss percent.
37. In how many years will Rs.150 double itself at 4% simple interest?
38. Ankit borrowed Rs.50,000 at 12% simple interest per year. He cleared the account by paying Rs.40,000 and his motorcycle at the end of 3 years. Find the cost of the motorcycle.
39. Anwar sold two washing machines at Rs.12,000 each. On one, he gains 25% and on the other he loses 25%. How much does he gain or lose in the whole transaction?
40. Rs.6400 was lent to Feroz and Alina at 15% per annum for  $3\frac{1}{2}$  years and 5 years respectively. What is the difference in the interest paid by them?
41. In the given figure, find  $x + y$ .

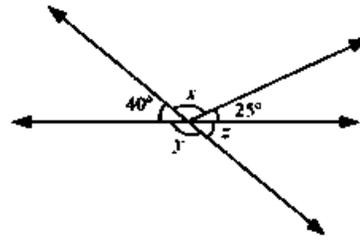


42. Find the unknown angles in the given figures:

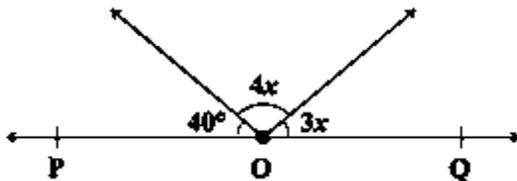
(i)  $AB \parallel CD$



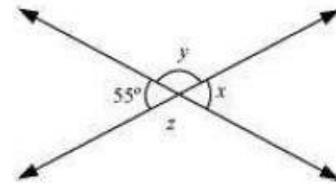
(ii)



(iii)

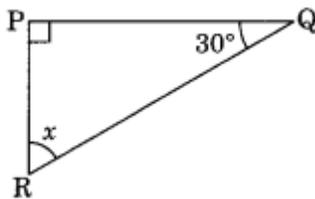


(iv)

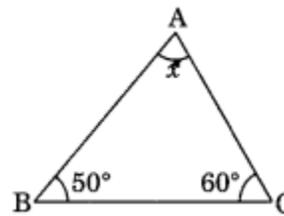


43. Find the missing angles of the given triangles:

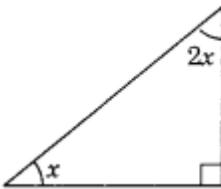
(i)



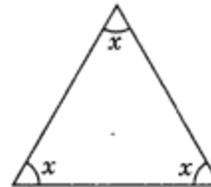
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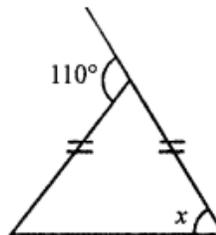
(iv)



(v)

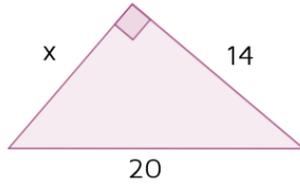


(vi)

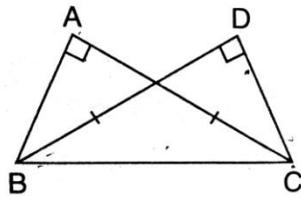


44. The three angles of a triangle are in the ratio 2:3:5. Find the measure of each angle. Also classify the triangle.

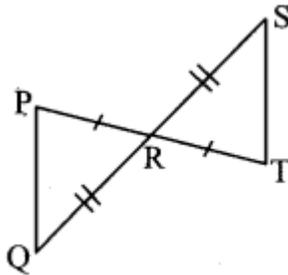
45. Appu drives his car 50km towards East and then drives 45 km towards North. How far is he from the starting point?
46. A rectangle measures 60m x 80m. Find its diagonal.
47. Find the missing side in the given triangle.



48. In the given figure, triangles ABC and DCB are right angled at A and D respectively and  $AC = DB$ . Write three pairs of corresponding parts to prove that the two triangles are congruent. Mention the type of congruence used and write it in symbolic form.

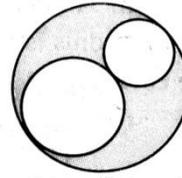
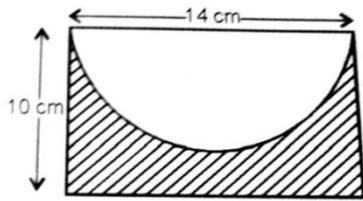


49. Write the type of congruence between the given triangles  $\Delta PQR$  and  $\Delta STR$ . Mention the corresponding congruent parts of them.



50. Construct a triangle PQR where  $QR = 4.2$  cm, angle  $Q = 130^\circ$ ,  $R = 40^\circ$ , Measure P. What kind of triangle is this?
51. Construct a triangle XYZ with  $XY = 9$  cm angle  $X = 80^\circ$  and  $Y = 65^\circ$ .
52. Each wheel of bicycle has a radius of 70 cm. How many complete revolutions does each wheel make to cover a distance of 2km 520 m.
53. Find the altitude of triangle whose area is  $85 \text{ cm}^2$  and base is 15.2 cm.
54. From a square cardboard of area  $196 \text{ cm}^2$ , a circle with biggest possible area is cut out. Find the area of remaining cardboard.

55. Find the area of the shaded region in the given figures.



56. If a number is chosen at random from the numbers 1 to 20 inclusive, what is the probability that:

- a) a prime number will be picked?
- b) an even number will be picked?
- c) a single digit number will be picked?

57. A bag contains 7 white balls, 3 red balls and 2 black balls. A ball is picked from the bag at random. Find the probability of:

- a) picking a red ball.
- (b) picking a black ball.
- (c) picking either a white or black ball.



How many shapes are there total in the array?

- a) If you were to select 1 shape at random from the array, what is the probability it will be a circle?
- b) If you were to select 1 shape at random from the array, what shape do you have the greatest probability of selecting?
- c) Which shape has a 37.5% chance (6 out of 16) of being selected?

59. A card is drawn from a well shuffled pack of 52 cards. Find the probability of getting:

- (i) '2' of spades
- (ii) a jack
- (iii) a king of red colour
- (iv) a face card
- (viii) a black card



- a) If you were to roll the dice one time what is the probability that it will land on a 2?
- b) If you were to roll the dice one time what is the probability that it will NOT land on a 3?
- c) If you were to roll the dice one time, what is the probability of it landing on an even number?