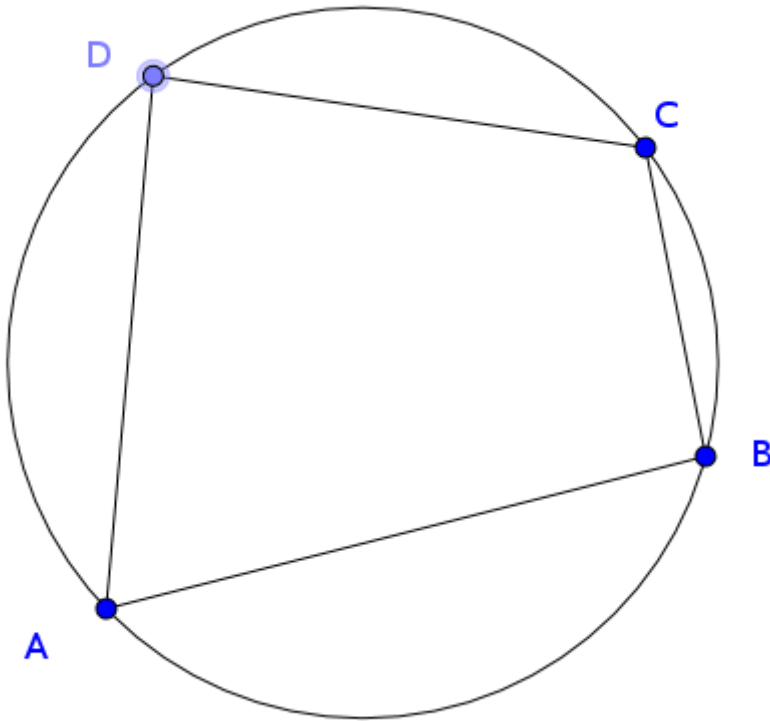


Samavakyangal

Question.1. In the figure sum of $\angle A$ and $\angle C$ is 180° . If $\angle C$ is 30° more than two times that of $\angle A$ find measures of $\angle A$ and $\angle C$ [Marks : (3)]



Ans. $\angle A = x$

$$\angle C = 2x + 30$$

$$x + 2x + 30 = 180$$

$$x = 50$$

$$\angle A = 50^\circ, \angle C = 130^\circ$$

Question.2. A team of 5 members went for a circus. The total expense for the ticket and food was Rs.490. They spent Rs. 240 for food. What is the price a ticket?

[Marks: (2)]

Ans. $5x + 240 = 490$

$$5x = 250$$

$$x = 50$$

Question.3. Rani has some money with her. She gave Rs. 13 to Sindhu. The balance with Rani is 65. How much money did she had in all ?[Marks:(2)]

Ans. $x - 13 = 65$

$$x = 65 + 13 = 78$$

Question.4. In the figure sum of $\angle A$ and $\angle C$ is 180° . If $\angle C$ is 30° more than two times that of $\angle A$ find measures of $\angle A$ and $\angle C$ [Marks:(3)]

Ans. $\angle A = x$

$$\angle C = 2x + 30 \quad (1)$$

$$x + 2x + 30 = 180 \quad (1)$$

$$x = 50$$

$$\angle A = 50^\circ, \angle C = 130^\circ \quad (1)$$

Question.5. 6 is subtracted from 4 times of a number is equal to 3 times the the same number added to 4. Find the number.[Marks:(3)]

Ans. $4x - 6 = 3x + 4$

$$x = 10$$

Question.6. went for a circus. The total expense for the ticket and food was Rs.490. The spent Rs. 240 for food. What is the price a ticket?[Marks:(2)]

Ans. $5x + 240 = 490$

$$5x = 250$$

$$x = 50$$

Question.7. The time taken to paint a toy is $\frac{1}{4}$ th of the time required to make a toy. If it took 10 minutes to paint the toy, how much time is required to make a toy?

[Marks:(2)]

Ans. $x / 4 = 10$

$$x = 4 \times 10 = 40 \text{ mts}$$

Question.8. Rani has some money with her. She gave Rs. 13 to Sindhu. The balance with Rani is 65. How much money did she had in all ?[Marks:(2)]

Ans. $x - 13 = 65$

$$x = 65 + 13 = 78$$

Question.9. An angle of regular polygon is 40° more than 3 times of its exterior angle. Find the measure of one exterior and one interior angle?[Marks:(3)]

Ans. Exterior angle = x° Interior angle = $(3x + 40)^\circ$

$$= x + 3x + 40 = 180^\circ$$

$$x = 35^\circ$$

Question.10. Age of a daughter is 3 more than that of son. Age of father is three times that of son. If the sum of the age of father and the daughter is 67. Find their age?

[Marks:(5)]

Ans. Age of son = x

Age of daughter = $x + 3$

Age of father = $3x$

$$3x + x + 3 = 67$$

$$\therefore x = 16$$

Age of son = $x = 16$

Age of daughter = $x + 3 = 19$

Age of father = $3x = 48$

Question.11. Cost of a book is 20 more than that of 2 times the pen. Cost of 6 pen and 7book is 240. What is the cost of a pen and a book?[Marks:(5)]

Ans. cost of one pen = x

cost of a book = $2x + 20$

cost of 7 books = $7(2x + 20)$

cost of 6 pens = $6x$

$$7(2x + 20) + 6x = 240$$

$$14x + 140 + 6x = 240$$

$$x = 5$$

cost of a pen = 5

cost of a book = 30

Question.12. Cost of a book is 3 more than that of 4 times the pen. Cost of a pen and book is 43. What is the cost of a pen and a book?[Marks:(4)]

Ans. price of one pen = x , price of one book = $4x + 3$

$$x + 4x + 3 = 43$$

$$x = 8$$

Question.13. A square is marked including 4 adjacent numbers in a calendar. If the sum of these numbers is 60, Find the numbers?[Marks:(4)]

Ans. numbers $x, x+1, x+7, x+8$

$$x + x + 1 + x + 7 + x + 8 = 60$$

$$4x = 44$$