



Chapter.1
ARITHMETIC SEQUENCES



A JOINT VENTURE OF DIET PALAKKAD AND SSK PALAKKAD



INTER BELL
INTERVENTION BASED ON EFFECTIVE LEISURE LEARNING

1. Write an arithmetic sequence with common difference 3. find its 11th term ?
2. Find the missing term of the given arithmetic sequences
 - a) 18, 26, __, __
 - b) 12, __, 20, __
 - c) __, 8, __, __
 - d) __, 6, __, 16
- 3) Consider the arithmetic sequence 12, 23, 34,.....
 - a) write algebraic form of this sequence
 - b) Find 10th term ?
- 4) Consider the arithmetic sequence 5, 9, 13,.....
 - a) write next two term
 - b) Is 2012 a term of this sequence ? Why ?
- 5)
 - a) write the algebraic expression of the sequence 9, 15, 21....
 - b) Find the position of 195 is this sequence?



- 6) Write down an arithmetic sequence with common difference 4. Can the difference of any two terms of this sequence be 2016 ?
- 7) The algebraic form of an arithmetic sequence is $6n + 5$.
- Write the sequence ?
 - Find 15th term?
- 8) 8th term of an arithmetic sequence is 53 and 15th term is 102.
- Find the Common difference ?
 - Find 25th term of this sequence?
- 9)
 - The sum of natural numbers from 1 to 50
 - What is the sum of First 20 natural numbers?
- 10) Find the sum of first 25 term of the arithmetic sequence 5, 8, 11,-----
- 11)
 - Find the sum of first 25 counting numbers ?
 - Find the sum of first 25 even numbers ?
 - Find the sum of first 25 odd numbers ?
- 12) Let the algebraic expression of an arithmetic sequence is $6n + 3$. Find the sum of first 20 terms of the sequence.
- 13) If the terms of the arithmetic sequence $\frac{2}{9}, \frac{3}{9}, \frac{4}{9}, \frac{5}{9}, \dots$ are represented as $x_1, x_2, x_3,$
- $x_1 + x_2 + x_3 + = \underline{\hspace{2cm}}$
 - $x_4 + x_5 + x_6 + = \underline{\hspace{2cm}}$
 - Find the sum of first 9 terms ?
 - What is the sum of first 300 terms ?



14) Observe the Pattern

3

7 11

15 19 23

27 31 35 39

.....

.....

A) Write next two lines

b) Find the first and last number in the 15th line?

15) The first term of an arithmetic sequence is 6 and the sum of the first 6 terms is 66.

a) What is the 6th term ?

b) What is the common difference ?

c) Write the first 6 terms of the sequence?



MATHEMATICS - STANDARD 10

REVISION QUESTIONS – CIRCLES AND TANGENTS



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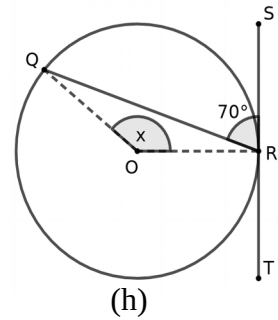
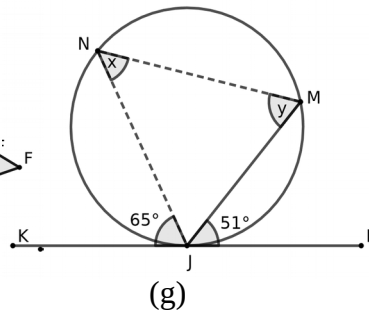
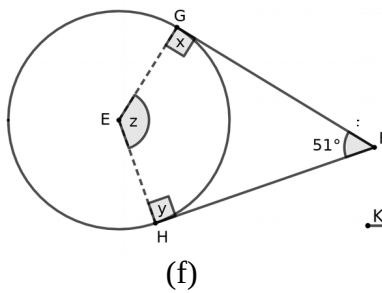
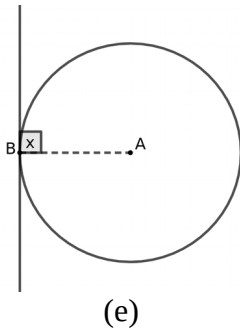
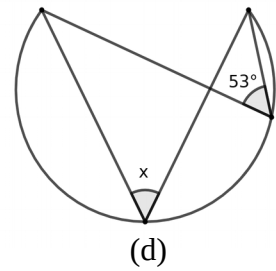
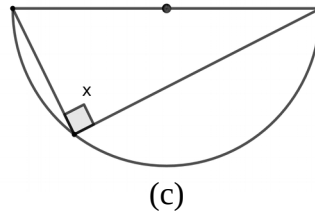
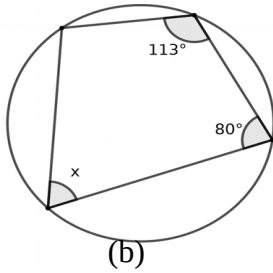
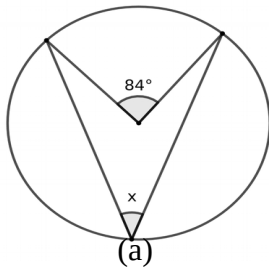


**INTER BELL
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STUDENT SUPPORT MATERIAL for X Mathematics

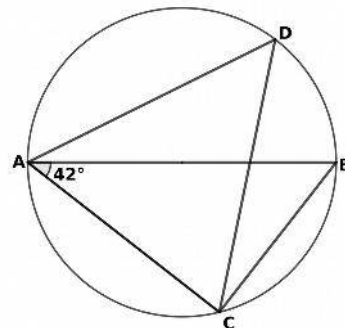
CIRCLES AND TANGENTS

1) Find the values of x , y , z as required



2) In figure AB is the diameter, $\angle BAC = 42^\circ$, $AD = CD$.

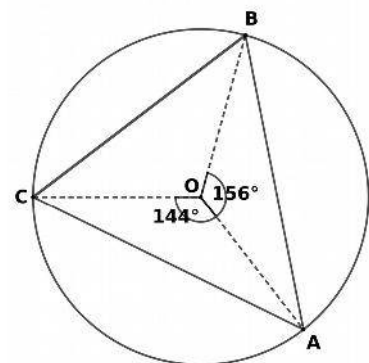
- Find $\angle ACB$
- Find $\angle ABC$
- Find $\angle ADC$
- Find $\angle DAC$
- Find $\angle DCB$



3) In figure O is the centre of the circle. In triangle ABC.

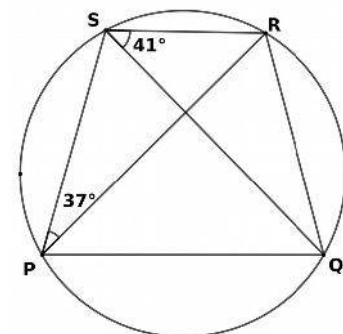
$\angle BOA = 156^\circ$, $\angle COA = 144^\circ$.

- Find $\angle COB$
- Find $\angle CAB$
- Find $\angle CBA$
- Find $\angle BAC$



4) In quadrilateral PQRS, PQ is parallel to SR.

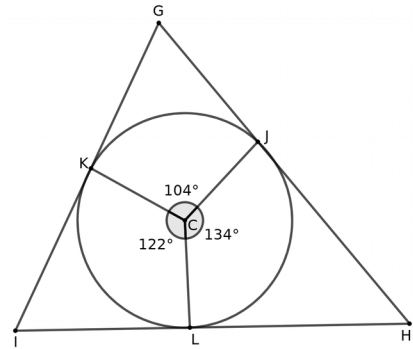
- Find $\angle RPQ$
- Find $\angle PQS$
- Find $\angle PRS$
- Find $\angle PRQ$
- Find $\angle PSQ$



DIET PALAKKAD - MODEL QUESTIONS - MATHEMATICS -SSLC 2021

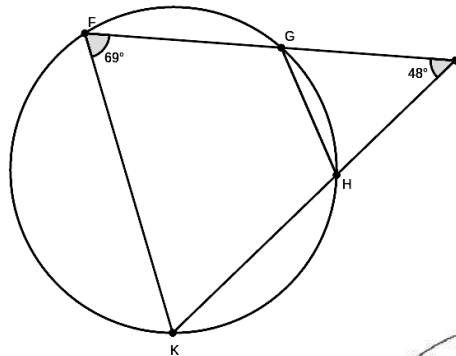
5) In figure, sides of triangle GIH, touches the circle at J,K,L.
 $\angle JCL = 134^\circ$, $\angle JCK = 104^\circ$, $\angle KCL = 122^\circ$,

- a) Find $\angle CLH$
- b) Find $\angle LHJ$
- c) Find $\angle G$, $\angle I$



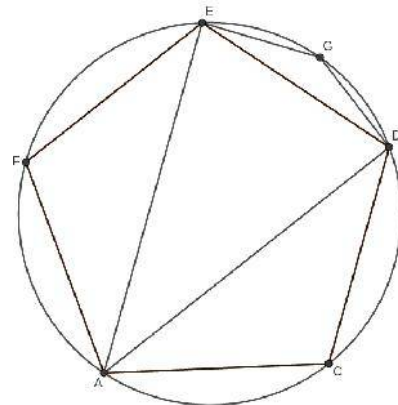
6) In figure $\angle F = 69^\circ$, $\angle J = 48^\circ$.

- a) Find $\angle GHK$
- b) Find $\angle GHJ$
- c) Find $\angle JGH$
- d) Find $\angle FKH$
- e) Are Triangles JFK, JGH similar?



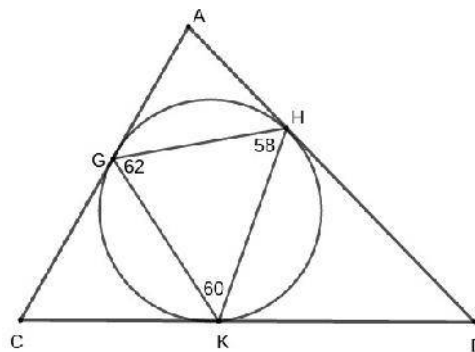
7) ACDEF is a regular pentagon.

- a) Find $\angle ACD$
- b) Find $\angle AED$
- c) Find $\angle EDA$
- d) Find $\angle EAD$
- e) Find $\angle EGD$



8) In figure

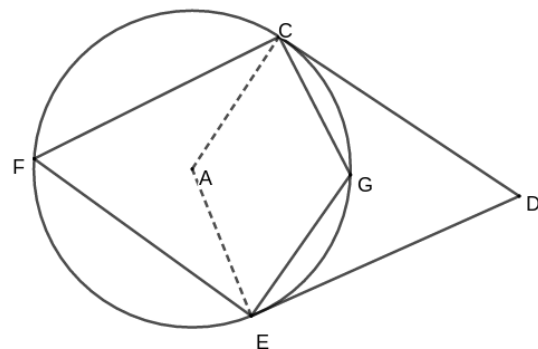
- a) Find $\angle HKD$
- b) Find $\angle DHK$
- c) Find $\angle D$
- d) Find $\angle A$
- e) Find $\angle C$



9) In figure DE and DC are tangents.

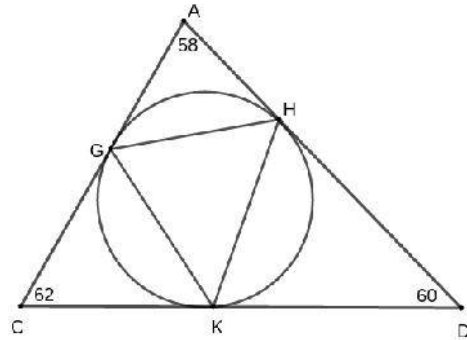
$\angle DCG = 20^\circ$, $\angle DEG = 25^\circ$

- a) Find $\angle CFG$
- b) Find $\angle EFG$
- c) Find $\angle CAE$
- d) Find $\angle CGE$
- e) Find $\angle CDE$

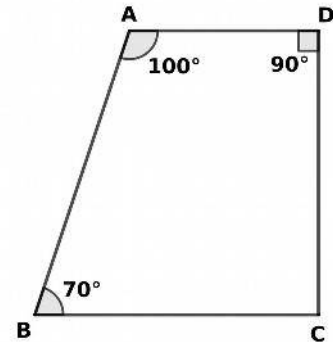


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- 10) In figure
 a) Find $\angle HKD$
 b) Find $\angle HGK$
 c) Find $\angle GKH$
 d) Find $\angle KHG$



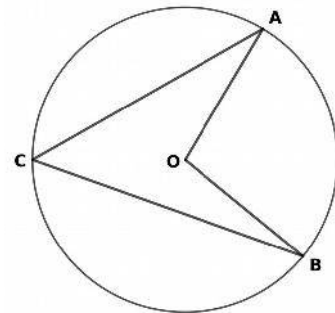
- 11) In quadrilateral ABCD,
 a) If a circle with diameter AC is drawn, will it pass through D?
 b) Where will be B with respect to the circle?
 c) A circle is drawn passing through A, B, C. Will it pass through D?
 c) Is ABCD a cyclic quadrilateral?



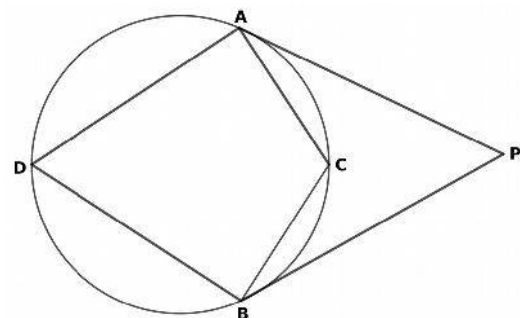
- 12) In figure, prove that $\angle AOB = 2(\angle OAC + \angle OBC)$.

Hint: Let $\angle A = x^\circ$, $\angle B = y^\circ$ also Draw CO

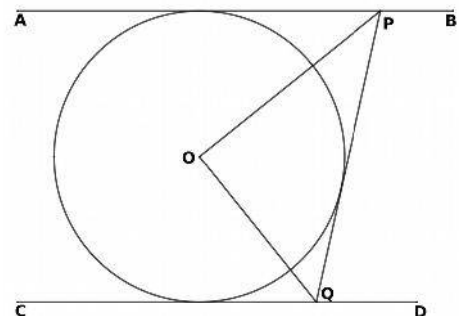
- a) $\angle ACO = \dots\dots\dots$,
 b) $\angle BCO = \dots\dots\dots$,
 c) $\angle AOB = \dots\dots\dots$



- 13) In figure PA, PB are tangents.
 Prove that $\angle PAC + \angle PBC + \angle ACB = 180^\circ$
 Hint: Let $\angle PAC = x^\circ$, $\angle PBC = y^\circ$, Also draw DC
 a) $\angle ADC = \dots\dots\dots$,
 b) $\angle BDC = \dots\dots\dots$,
 c) $\angle ACB = \dots\dots\dots$



- 14) In O is the centre of circle, AB, CD, PQ are tangents.
 Show that OPQ is a right triangle.
 a) If $\angle OPQ = x^\circ$, write $\angle OPA$
 b) If $\angle OQP = y^\circ$, write $\angle OQC$
 c) Since AB and CD are parallel, $\angle CQP + \angle APQ = \dots\dots\dots$
 d) $2x + 2y = \dots\dots\dots$

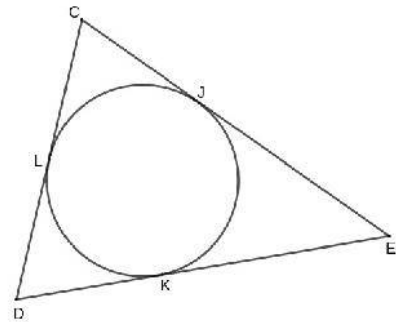


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15) In figure a circle is drawn , touching the sides of a triangle.

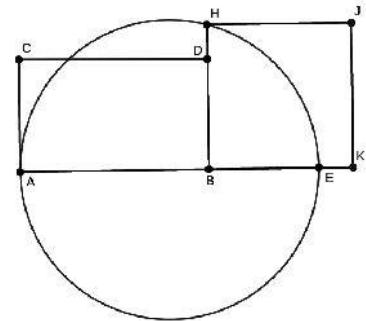
CD = 6cm , DE = 8cm , CE = 10cm.

- a) If $DK = x$ cm Find length of DL
- b) Find length of KE.
- c) Find lengths of JE , LC , CJ.
- d) $CJ + JE = \dots\dots\dots$
- e) Write the lengths of the 6 parts of tangents.



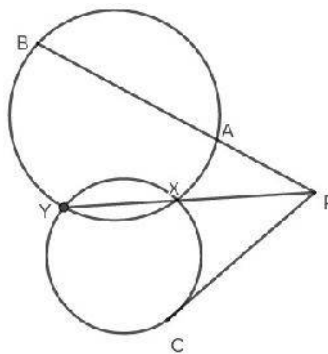
16) In figure, AE is the diameter. BH is perpendicular to AE. If the area of the square BKJH is 18cm^2 and $BD = 3\text{cm}$,

- a) Find length of BH
- b) Find length of BE
- c) $AB \times BE = \dots\dots\dots$
- d) Find length of AB



17) In figure $PA = 6\text{cm}$, $AB = 18\text{cm}$,
 $PX = 8\text{cm}$,

- a) $PA \times PB = \dots\dots\dots$, $PC^2 = \dots\dots\dots$
- b) Find length of PY
- c) Find length of PC



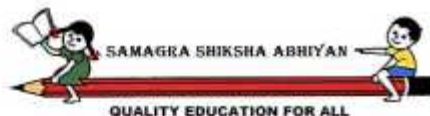
Constructions

- 1) Draw a right triangle of hypotenuse 7.5cm and one side 3cm.
- 2) Using the concept of circles , construct an angle of measure $30\frac{1}{2}^\circ$.
- 3) Draw a line segment of length $\sqrt{21}$, draw a square of area 21cm^2 .
- 4) Draw a rectangle of sides 7cm , 3cm and draw a square of same area.
- 5) Draw a circle of radius 3cm, mark a point 7cm away from centre . Draw tangents from there.
- 6) Draw a circle of radius 5cm. Draw a triangle of angles 50° , 64° and vertices on the circle.
(Draw a triangle of cir-cum radius 5cm , and angles 50° , 64°)
- 7) Draw a circle of radius 4cm. Draw a triangle of angles 60° , 50° and sides touching the circle.
(Draw a triangle of In-radius 5cm , and angles 60° , 50°)
- 8) Draw triangle ABC with $AB = 6\text{cm}$, $\angle A = 54^\circ$, $AC = 7\text{cm}$. Draw its incircle and measure radius
- 9) Draw a rhombus of sides 7cm , and one angle 45° and draw its incircle.
- 10) Draw a circle and two perpendicular chords. Draw tangents at their end points.



MATHEMATICS - STANDARD 10

REVISION QUESTIONS – UNIT 3 - PROBABILITY



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STUDENT SUPPORT MATERIAL for X Mathematics

Questions:

1. A coin is tossed. What is the probability of getting a
 - i) head?
 - ii) tail?
2. A box contains 7 green balls and 9 blue balls. If you take a ball at random, find the probability of getting a
 - i) green ball.
 - ii) blue ball.



MATHEMATICS - STANDARD 10

REVISION QUESTIONS – UNIT 3 - PROBABILITY

- 3. A bag contains 15 black beads and 25 white beads. If one bead is taken at random, what is the probability that of getting a**
- black bead?**
 - white bead?**
- 4. Raju is asked to tell a natural number less than 10. What is the probability that the number is**
- an odd number?**
 - an even number?**
 - a prime number?**
 - a perfect square?**
 - a multiple of 4?**
- 5. Raji is asked to tell a natural number less than 20. What is the probability that the number is**
- an odd number?**
 - an even number?**
 - a prime number?**
 - a perfect square?**
 - a multiple of 6?**



MATHEMATICS - STANDARD 10

REVISION QUESTIONS – UNIT 3 - PROBABILITY

- 6. A dice is thrown once. What is the probability of getting**
- i) the number 4?**
 - ii) an odd number?**
 - iii) an even number?**
 - iv) a prime number?**
 - v) a perfect square?**
 - vi) a multiple of 3?**
- 7. Separate cards numbered 1 to 15 are made. One is asked to take a card from this at random. What is the probability that the number is**
- i) an odd number?**
 - ii) an even number?**
 - iii) a prime number?**
 - iv) a perfect square?**
 - v) a multiple of 5?**
- 8. Each of the letters of the word MATHEMATICS is written on separate paper slips and put in a box. If a person takes a paper slip from the box at random, find the probability of**
- i) getting letter "A".**
 - ii) getting letter "M".**
 - iii) not getting letter "A".**



MATHEMATICS - STANDARD 10

REVISION QUESTIONS – UNIT 3 - PROBABILITY

- 9. A coin is tossed twice (Two coins are tossed together). What is the probability of getting**
- i) two heads?**
 - ii) two tails?**
 - iii) one head and a tail?**
- 10. Two dice are thrown simultaneously. What is the probability that the sum of the numbers is**
- i) odd?**
 - ii) even?**
 - iii) a prime number?**
 - iv) a perfect square?**
 - v) 7?**
- 11. Two dice are thrown simultaneously. What is the probability that both the numbers are**
- i) odd?**
 - ii) even?**
 - iii) same?**
 - iv) prime?**
 - v) different?**



MATHEMATICS - STANDARD 10

REVISION QUESTIONS – UNIT 3 - PROBABILITY

12. A box contains 3 white balls and 5 red balls. Another box contains 7 white balls and 9 red balls.

- i) If one ball each is drawn at random from both the boxes, which box is better for getting a red ball?**
- ii) If all the balls of second box are transferred to first box and then drawn a ball at random, what is the probability of getting a white ball?**



Chapter 4

Second Degree Equations

Focus area

- Formation of second degree equation
- Squaring problems related area and perimeter of rectangles
- Solution of second degree equation (square completion method)

Focus Point : Formation of second degree equation

Write the second degree equation for the following statements

1. The sum of a number and its square is 42.
2. If 10 is added with the square of a number gives 35.
3. If 9 is added with the square of a number gives 58
4. If four times a number is added with the square of that number gives 16.
5. The sum of a number and its square is 6 times the number.

Focus Point : Squaring problems related area and perimeter of rectangles

Hint : Half the perimeter of a rectangle = Length + Breadth

1. The perimeter of a rectangle is 24 cm and its area is 20 sq.cm.
 - a) Half of the perimeter =.....
 - b) If x is the breadth, length =.....
 - c) What is the equation for finding the area of the rectangle?
2. The perimeter of a rectangle is 26 cm and its area is 40 sq.cm.
 - a) Half of the perimeter =.....
 - b) If x is the breadth, length =.....
 - c) What is the equation for finding the area of the rectangle?
- 3) If the perimeter of a rectangle is 18cm and its area is 18 sq.cm,
Write the equation to denote the area of the rectangle.

- 4) The length of a rectangle is 6 cm more than its breadth. Its area is 280sq.cm.
- If x is the breadth, length =.....
 - Frame the equation of the area.
- 5) We have to construct a rectangle of perimeter 100m and area 600sq.m
- If the breadth is taken as x , what will be the length?
 - Write the area of this rectangle as an algebraic equation

Focus Point : Solution of second degree equation (square completion method)

- If ' x ' is a natural number
 - Write the square of the number
 - What is 6 times the number?
 - If 6 times the number is added with the square of the number gives 55, what is the number
- If ' x ' is the present age of Ramu
 - What is his age after 10 years?
 - Write the product of his present age and his age after 10 years in the algebraic form
 - If this product is 144, what is his present age?
- The product of a number and two more than the number is 48.
 - Form a second degree equation ?
 - Find the numbers.
- fill in the blanks

$$x^2 + 6x = 91$$

$$x^2 + 6x + \dots = 91 + \dots$$

$$(x + 3)^2 = \dots$$

$$(x + 3) = \dots$$

$$x = \dots \text{ or } x = \dots$$

- In a right triangle one of the side is 7 cm more than its shortest side. Its hypotenuse is 1 cm more than 2 times of its shortest side Find the length of all sides of the triangle.



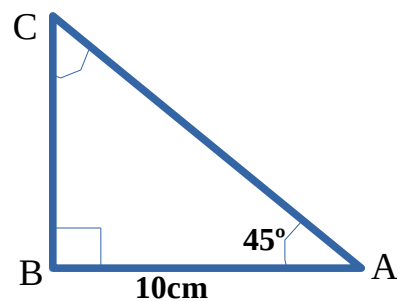
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MATHS -- STANDARD 10
REVISION QUESTIONS - CHAPTER 5 -TRIGONOMETRY

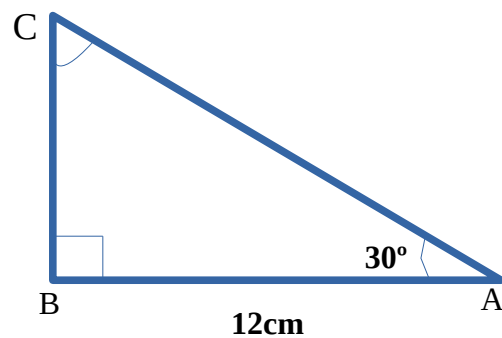
1. In ΔABC , $\angle A = 45^\circ$, $\angle B = 90^\circ$, $AB = 10$ cm, then

- a) $\angle C = ?$
- b) $BC = ?$
- c) $AC = ?$

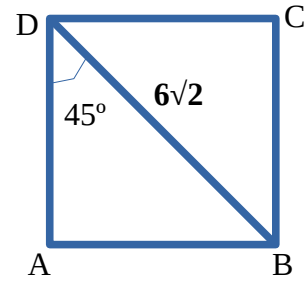


2. In ΔPQR , $\angle A = 30^\circ$, $\angle B = 90^\circ$, $AB = 12$ cm, then

- a) $\angle C = ?$
- b) $BC = ?$
- c) $AC = ?$



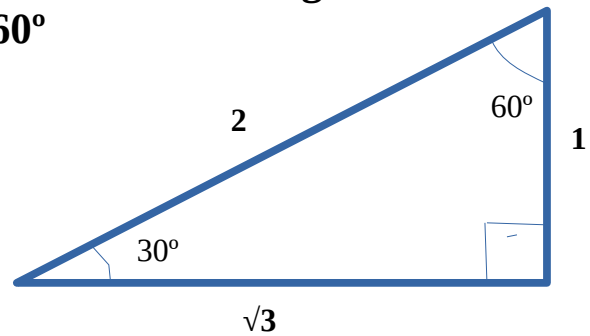
3. Find the perimeter and area of the given square ABCD.



4.

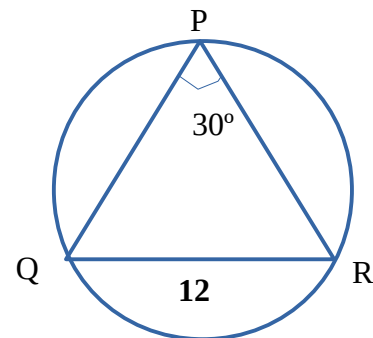
From the figure, write the values of the following.

$\sin 30^\circ$, $\cos 30^\circ$, $\sin 60^\circ$, $\cos 60^\circ$

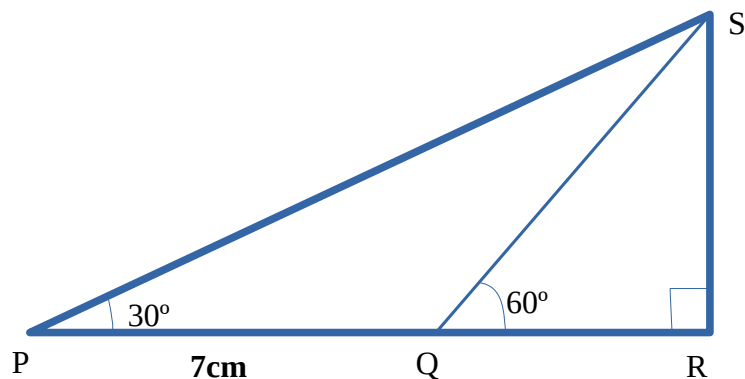


5. Circumcircle of ΔPQR is drawn.

If $\angle P = 30^\circ$, $QR = 12\text{cm}$ then find the diameter of the circle



6.



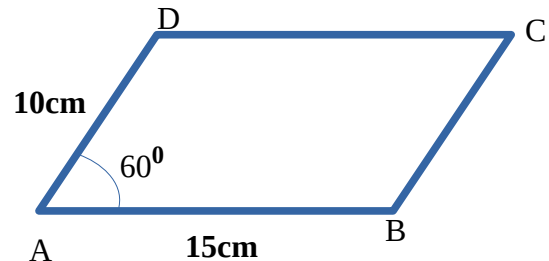
In the figure, $PQ = 7\text{cm}$, $\angle P = 30^\circ$, $\angle Q = 60^\circ$, then

a) $\angle PQS = ?$

b) $\angle PSQ = ?$

- c) length of QS = ?
- d) length of RS = ?

7. Find the perimeter and area of the parallelogram ABCD

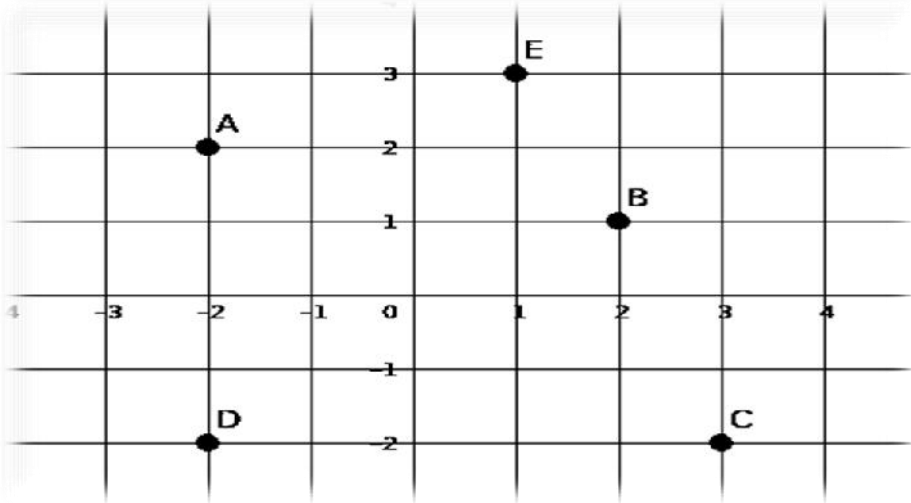


8. In a triangle, length of 2 sides are 18cm and 20cm respectively and the angle between them is 30° . Calculate the area of the triangle
9. A boy standing at a distance of 50m from the bottom of a tower, looks the top of the tower at an angle of elevation 30° .
- a) Draw a rough figure
 - b) Find the height of the tower
10. A man standing at the top of a building, sees an object which is 20m away from the building, at an angle of depression 60° .
- a) Draw a rough figure
 - b) Find the height of the building



CHAPTER 6 COORDINATES

1. Find the coordinates of the points A, B, C, D, and E from the given figure



2. Draw X, Y axis and plot the following points

A(2,3) B(4,-3) C(-1,-5),D(-3,-2) E(5,5) F(2,0) G(0,2) H(0,0)

3. Classify the given points based on the table

A(3,0),B(0,0),C(0,7),E(-4,0),F(4,1),G(5,3),H(4,6), I(5,7),J(0,-5)

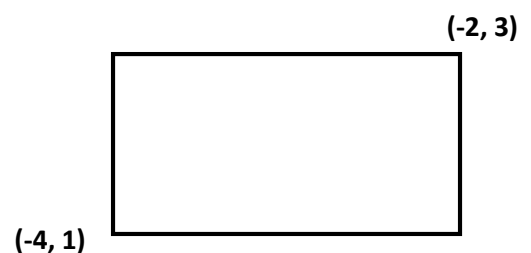
CLASSIFICATION	POINTS
Origin	
Points on the X - axis	
Points on the Y - axis	
Points which are parallel to the X axis	
Points which are parallel to the Y axis	

4. Find the opposite coordinate of the given rectangles

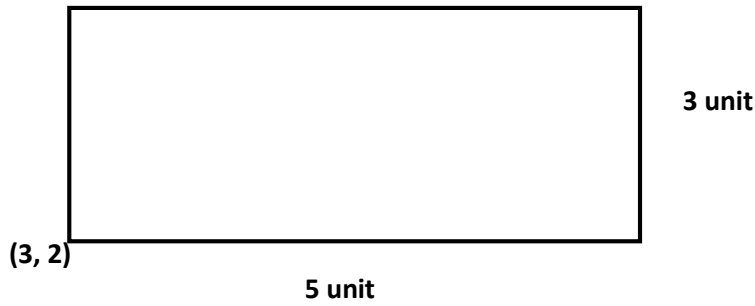
a)



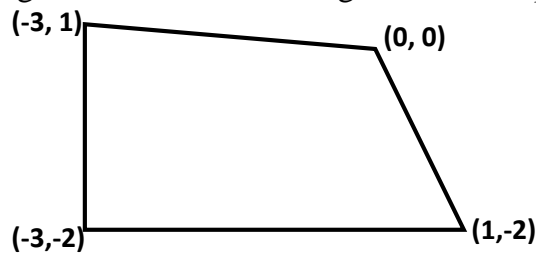
b)



c)



5. Find the distance between the points A (4, 5) and B (1, 5).
6. Find the distance between the points P (6, 4) and Q (6, 2).
7. Find the distance between the points M (4, 3) and R (1, 2)
8. The opposite vertices of a rectangle are (1, 1) and (7, 7). Find other coordinates and also find its Perimeter.
9. If origin is the centre of the circle and (4, 3) is a point on the circle. Find the radius of the circle.
10. Calculate the length of the sides and diagonals of the quadrilateral



11. Find the distance between the points P (3, 4) and Q (9, 12)
12. Plot and join the points after drawing X and Y axis. Identify the figure.
A (1, 3), B (3, 3), C (1, 1), D (3, 1)
13. a) Check whether the circle with centre at the point (2,4) and radius 5 units pass through the Point (2, 0)
b) Write the coordinates of the points at which this circle cuts the X axis



MATHEMATICS - STANDARD 10

REVISION QUESTIONS – UNIT 8 - SOLIDS



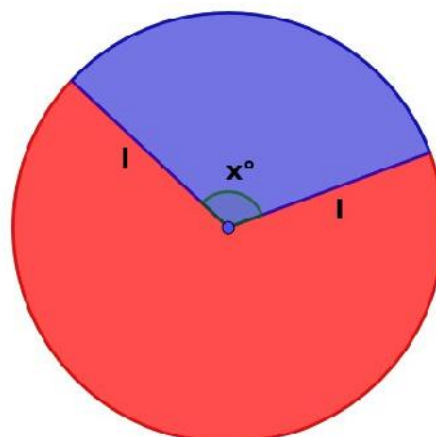
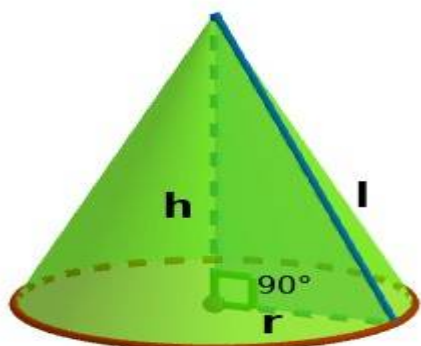
A JOINT VENTURE OF DIET PALAKKAD AND SSK PALAKKAD



**INTER BELL
INTERVENTION BASED ON EFFECTIVE LEISURE LEARNING**

STUDENT SUPPORT MATERIAL for X Mathematics

CONE





MATHEMATICS - STANDARD 10

REVISION QUESTIONS – UNIT 8 - SOLIDS

Questions:

- 1) A sector is cut out from a circle of radius 10 centimetres, and rolled up into a cone. What is the slant height of the cone?
(5, 7.5, 10, 12)

- 2) A sector of radius 12 centimetres and central angle 120° . A cone is made using that sector.
 - a) What is the slant height of the cone?
 - b) Calculate the base radius of the cone. (Hint $\frac{r}{l} = \frac{x}{360}$)
 - c) Calculate the curved surface area.
 - d) Calculate the surface area.

- 3) The central angle and radius of a sector are 288° and 20 centimetres. A cone is made from it.
 - a) What is the slant height of the cone?
 - b) Find the base radius of the cone.
 - c) Calculate the height of the cone.
 - d) Calculate the volume of the cone.

- 4) The height and base area of a cylindrical wooden block are 40 centimetres and 31.4 square centimetres. A wooden cone of maximum size is curved out from the cylinder.
 - a) What is the height of the cone?
 - b) Calculate the volume of the cone.



MATHEMATICS - STANDARD 10

REVISION QUESTIONS – UNIT 8 - SOLIDS

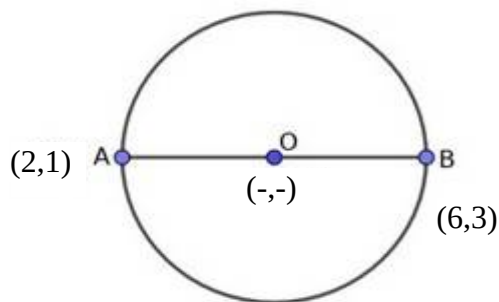
- 5) The height and slant height of a cone makes an angle 30° (Here the base diameter is equal to the slant height).
If the base radius is 10 centimetres.
- What is the slant height and height of the cone?
 - Calculate the curved surface area.
 - Calculate the volume. $\sqrt{3} \approx 1.7$
- 6) A metal cone of slant height 17 centimetres and base radius 8 centimetres is completely melted and recast into small cones of height 3 centimetres and base radius 2 centimetres.
- What is the height of the big metal cone?
 - Calculate the volume of the big cone.
 - How many small cones can be made from that big metal cone?
- 7) Using a thin metal sheet, in the shape of a semi circle of radius 48 centimetres, a conical vessel is made.
- Find out the measurement of the slant height and base radius of vessel.
 - Calculate the curved surface area of the vessel.
 - Calculate the height of the vessel.
 - What is the ratio between the base radius, height and slant height of the cone(vessel)?
 - Calculate the volume.



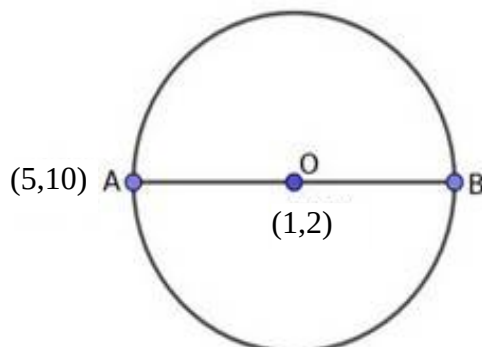
CHAPTER 9

GEOMETRY AND ALGEBRA

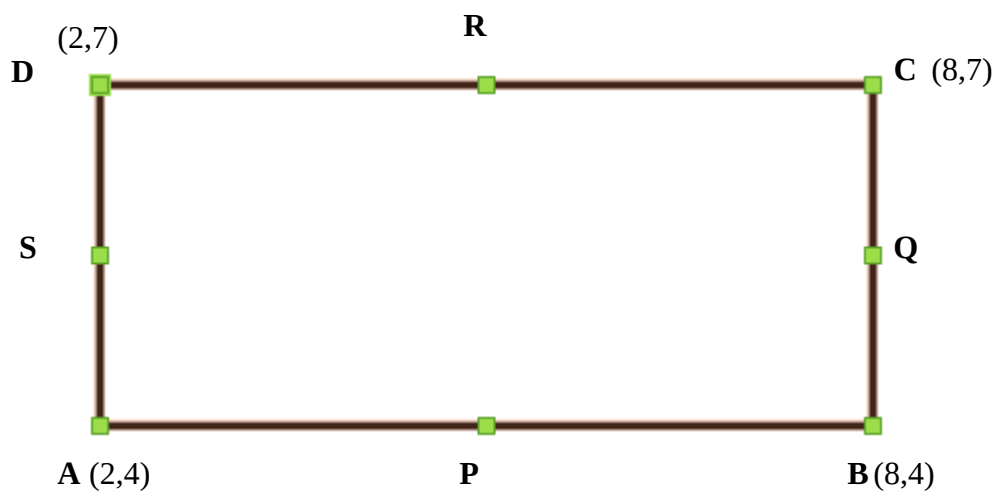
1. Find the mid -point of a line joining the points (3,4) and (5,10).
2. Find the mid -point of a line joining the points (1,1) and (7,7).
3. Find the mid -point of a line joining the points (-2,-7) and (-4,-1).
4. Find the mid -point of a line joining the points (-4,2) and (-10,4).
5. Find the mid -point of a line joining the points (-5,9) and (7,3).
6. Find the coordinate of the centre and radius of the circle



7. O (1,2) is the centre and A(5,10) is a point on the circle, find the coordinate of B.



8. Find the slope of a line joining the points (1,1) and (4,5)
9. Find the slope of a line joining the points (-1,2) and (9,6)
10. Find the slope of a line joining the points (-3,4) and (-6,-8)
11. Find the slope of a line joining the points (5,9) and (-6,-3)
12. Find the slope of a line joining the points (-6,7) and (4,-2)
13. P,Q,R,S are the mid point of the sides of a rectangle ABCD find its coordinates





MATHEMATICS - STANDARD 10

REVISION QUESTIONS – UNIT 10 - POLYNOMIALS



A JOINT VENTURE OF DIET PALAKKAD AND SSK PALAKKAD



**INTER BELL
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STUDENT SUPPORT MATERIAL for X Mathematics

Questions:

1. If $P(x) = x^2 - 3x - 2$, What is the degree of this polynomial ?

(0, 1, 3, 2)

2. If $P(x) = ax^2 + bx + c$, $P(0) = 4$ then $c = \dots\dots\dots$

(1,0,2,4)

3. If $P(x) = ax^2 + bx + c$, $P(0) = 0$ then ,which will be a factor of $P(x)$?

($x, x + 1, x - 1, x + 2$)



MATHEMATICS - STANDARD 10

REVISION QUESTIONS – UNIT 10 - POLYNOMIALS

4. If $P(x) = ax^2 + bx + c$, $P(1) = 0$ then $a + b + c = \dots\dots$

(2,3,0,1)

5. If $P(x) = ax^2 + bx + c$, $a + b + c = 0$ then which is the factor of $P(x)$?

($x, x+1, x-1, x +2$)

Do you remember.....?

$$a^2 - b^2 = (a+b)(a-b)$$

so
$$x^2 - 1 = (x + 1)(x - 1)$$

6. Write all the second degree polynomials given below as the product of two first degree polynomials

• $x^2 - 4$

• $x^2 - 9$

• $x^2 - 25$

• $x^2 - 100$

• $x^2 - \frac{1}{4}$

• $x^2 - \frac{1}{25}$

• $4x^2 - 25$



MATHEMATICS - STANDARD 10

REVISION QUESTIONS – UNIT 10 - POLYNOMIALS

7. If $P(x) = 2x^2 - 3x$, Write $P(x)$ as the product of two first degree polynomials.
8. If $P(x) = x^2 - 6x + 5$ then find
 $P(0)$, $P(1)$, $P(-1)$, $P(2)$
9. If $P(x) = x^2 - 5x + 4$, Check whether the following are the factors of $P(x)$
- $(x - 1)$
 - $(x + 1)$
 - $(x - 3)$
10. If $P(x) = 2x^2 - 3x + 1$ then
- a) Find $P(1)$
 - b) Write one first degree factor of $P(x)$
 - c) Write $P(x)$ as the product of two first degree polynomials.
11. If $P(x) = x^2 - 5x + 6$, then
- a) Find $P(2)$
 - b) Write one first degree factor of $P(x)$
 - c) Write $P(x)$ as the product of two first degree polynomials.



MATHEMATICS - STANDARD 10

REVISION QUESTIONS – UNIT 10 - POLYNOMIALS

12. If $P(x) = x^2 - 7x + 13$ then

a) Find $P(3)$

b) Which number is to be subtracted from $P(x)$ to make $(x - 3)$ a factor of $P(x)$?

c) Write $P(x) - P(3)$ as the product of two first degree polynomials.

13. If $(x - 1)$ is a factor of $P(x) = x^2 + kx + 6$ then find the value of k .

DIET PALAKKAD



MATHEMATICS - STANDARD 10

REVISION QUESTIONS – UNIT 11 - STATISTICS



A JOINT VENTURE OF DIET PALAKKAD AND SSK PALAKKAD



**INTER BELL
INTERVENTION BASED ON EFFECTIVE LEISURE LEARNING**

STUDENT SUPPORT MATERIAL for X Mathematics

Questions:

1. The temperature of days in a week is given below. Find the mean and median.
 $31^{\circ}, 28^{\circ}, 30^{\circ}, 29^{\circ}, 32^{\circ}, 27^{\circ}, 33^{\circ}$
2. Wages given to 7 workers in a week is shown below. Find the mean and median.
3500, 2100, 2500, 2300, 2300, 2200, 3300
3. Find the mean and median of,
(a) First five natural numbers.
(b) First five prime numbers.



MATHEMATICS - STANDARD 10

REVISION QUESTIONS – UNIT 11 - STATISTICS

4. The mark Vipin got in 6 exams are:

65, 72, 59, 81, 68, 72

Vineeth wrote only 5 exams. His mark is given below.

71, 54, 68, 82, 75

Whose performance is better?

5. Consider the multiples of 4 from counting numbers 1 to 45.

(a) Which number will be the median of this collection.

(b) Find the mean of this collection.

(c) What is the relation between mean and median.

6. IF the mean of 4, 5, a, 6, 9, b, 11 is 10. Find the value of a+b.

7. The following marks are obtained for a student in SSLC Model Examination.

10, 12, 13, 14, 17, 13, 18, 17, 19, 16

(a) Calculate the mean of marks.

(b) Which mark comes in the middle if the marks are arranged in the ascending order?

(c) Calculate the median of marks.

8. If mean is 5, what is the value of p?

x	2	3	5	P	9
f	9	4	6	3	8



MATHEMATICS - STANDARD 10

REVISION QUESTIONS – UNIT 11 - STATISTICS

9. The days in a month are classified according to the amount of rain received in different regions.

Amount of rain Received	Number of days
54	3
56	5
58	6
55	3
50	2
47	4
44	5
41	2

Compute the median of rain received in a day of that month?

10. The table shows the classification according to age of 40 students from a school who participated in an athletic meet. Find the median age of students?

Age	Number of students
12	3
13	7
14	11
15	10
16	5
17	4



MATHEMATICS - STANDARD 10

REVISION QUESTIONS – UNIT 11 - STATISTICS

11. The table shown below classifies number of students according to weight among 40 students in a class. Find the median weight?

Weight	32	34	36	38	40	42
Number of students	3	5	10	12	7	3

12. The daily wage of employees working in a factory is given below. Find the median daily wage?

Daily Wages	500	550	600	650	700	750
Number of employees	3	5	8	6	5	1