## CLASS $6^{\text {TH }}$ MATHS Chapter. Area and Perimeter - 1 JSUNIL TUTORIAL, PANJABI COLONY GALI 01

1. Find perimeter of rectangle whose length $=6 \mathrm{~m} 8 \mathrm{dm}$ and breadth $=4 \mathrm{n} 6 \mathrm{dm}$
2. Find the cost of fencing rectangle field $24 n$ long and 18 m wide at Rs. 6.25 per meter.
3. The length and breadth of rectangle field are in ratio $5: 3$. If its perimeter is 64 m . Find the dimensions.
4. The cost of fencing a rectangle field at Rs. 14.60 per $\mathbf{m}$ is $\mathbf{1 6 0 6}$. If the width of the field is $\mathbf{2 3 m}$ find its length.
5. The length and breadth of rectangle field are in ratio 3:2. The cost of fencing the field at Rs. 6.50 per $m$ is Rs. 520 . Find the dimensions of the field.
6. The cost of putting fence around a square field at Rs. 15 per m is Rs. 432 . Find the length of each side of the field.
7. Each side of square is of 21 m . Adjacent to this field, there is a rectangular field having its side in ratio4:3. If perimeters of both fields are equal find the dimensions of the rectangular field.

## CLASS $6{ }^{\text {TH }}$ MATHS Chapter. CIRCUMFERENCE OF CIRCLE JSUNIL TUTORIAL, PANJABI COLONY GALI 01

1. Find the circumference of circle if $r=14 \mathrm{~cm}$
2. Find the diameter of circle if circumference is 66 cm
3. Find the diameter of circle if circumference is $75 \frac{3}{7} \mathrm{~cm}$
4. The diameter of wheel of a car is 70 cm . Find the distance travel by wheel of car in 1000 revolutions.
5. Find the circumference of circle if diameter of circle is 10 m .
6. The diameter of wheel of a car is 70 cm . How many revolutions will it take to make to travel 1.65 km .
7. The diameter of wheel of a car is 70 cm . Find the distance travel by wheel of car in 50 revolutions.
8. Find the diameter of circle if circumference is 88 cm .
9. The diameter of wheel of a car is 77 cm . How many revolutions will it take to make to travel 1210 mkm .
10. Find the radius of circle if circumference is 66 cm
11. Find the area of a rectangle whose length and breadth 45 cm and 16 cm respectively. Also find perimeter of rectangle
12. A room is 5 m 40 cm long and 3 m 75 cm wide. Find the area of the carpet needed to cover the floor.
13. Find the cost of cultivating a rectangular field 34 m long and 18 m wide at Rs. 4.50 per sq metre. Also find the cost of fencing the field at Rs. 2.25 per metre.
14. A room is 9.68 m long and 6.3 m wide. Its floor is to be covered with rectangular tiles of size 22 cm by 10 cm . Find the total cost of the tiles at Rs. 5 per tiles.
15. The area of rectangle is 650 sq cm and one of its side is 13 cm . Find the perimeter of rectangle.
16. The total cost of flooring a room at Rs. 8.50 per sq metre is Rs. 510 . If the length of the room is 8 m . Find its breadth.
17. Find perimeter of square field whose side is 6.3 m
18. The top of the table measure 2 m 25 cm by 1 m 20 cm .Find its area in square metre.
19. How many envelop can be made from a sheet of paper 324 cm by 172 cm . if envelop require a piece of paper of size 18 cm by 12 cm .
20. A room is 12.5 m by 8 m .A square carpet of side 8 m is laid on the floor . Find the area of carpet that is not carpeted.

## CLASS $6^{\text {TH }}$ MATHS Chapter. area of rectangle <br> JSUNIL TUTORIAL, PANJABI COLONY GALI 01

1. A lane, 150 m by 9 m is paved with bricks of length 22.5 cm and breadth 7.5 cm . Find the number of bricks required.
2. A room is 13 m long and 9 m broad. Find the cost of carpeting the room with a carpet 75 cm broad at the rate of Rs. 6.50 per metre.
3. The length and breadth of rectangular park are in ratio $5: 3$ and its perimeter is 128 m . find the area of the park.
4. Two plots have same perimeter. One is a square of side 64 m and other is rectangle of length 70 m and breadth 58 m which field has greater area and by how much.
5. Find the cost of cultivating a rectangular field at Rs. 1.50 per sq metre is Rs. 1833 . If breadth of field is 26 m .Find the cost of fencing at Rs. 7.50 per metre.
6. The length and breadth of a play ground are 62 m 60 cm and 25 m 40 cm respectively. Find the cost of turfing at Rs. 2.50 per square meter. How long man take to go three times around the field if he walks at the rate of 2 metre per second.

CLASS $6{ }^{\text {TH }}$ MATHS Chapter. RATIO AND PROPORTIONAL JSUNIL TUTORIAL, PANJABI COLONY GALI 01

1. Find the ratio of
(i) 40 paisa to Rs 4 (II) 24 min . to an hr (III) 125 ml to 2 litres (IV) 4 m to 36 cm (V) Dozen to Score 2. Find the ratio the price of coffee to that of tea, when coffee cost rupees 24 per100 gm and tea Rs 80 per kg?
2. Two numbers are in ratio $2: 7$. If the sum of the numbers are 81 . Find the numbers?
3. Divide the number 642 in ratio $1: 2: 3$ among $A, B, C$
4. The ratio of Length and breadth of rectangle is $5: 3$. Find I and b if perimeter is 256 ?
5. Which ratio is larger (I) $5: 12$ or 17:30 $\quad$ (ii) $2: 3$ or $16: 24$
6. A bus travel 126 km in 3hrs.and a train travel 315 km in 5 hrs . Find ratio of their speed?
7. Are (I) $7,42,13,78$ in proportional? (ii) Find x if $48,36, \mathrm{x}$ are in proportional?
8. First ,third, fourth term of a proportional are $45,25,35$, Find third term.
9. If $36, x, x, 16$ are in proportional Find value of $x$
10. Find value of $x$ if $25,35, x$ are in proportional
11. An electrical pole cast shadow length 20 m at a time when a tree of 6 cm cast shadow of 8 m . Find the height of pole .
12. The length of the side of a triangle are in ratio $1: 3: 5$. If perimeter of triangle is 90 cm find its largest side
13. Rohit earns Rs. 7650 and saves Rs. 918 per month Find ratio of
(I) his income to his saving (II) His income to his expenditure (III) his expenditure to his saving 15. Find the ratio of the price of pencil to that of ball pen if pencil cost Rs 96 per score and ball pen cost Rs. 50.40 per dozen.

## CLASS $6{ }^{\text {TH }}$ MATHS Chapter. AREA AND PERIMETER <br> JSUNIL TUTORIAL, PANJABI COLONY GALI 01

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2. A room is 5 m 40 cm long and 3 m 75 cm wide. Find the area of the carpet needed to cover the floor.
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CLASS $6^{\text {TH }}$ MATHS Chapter. AREA AND PERIMETER<br>JSUNIL TUTORIAL, PANJABI COLONY GALI 01

1. A room is 9.68 cm long and 6.2 cm broad. If its floor is covered with a rectangular tiles with 22 cm by 10 cm . Find the cost of the tiles at Rs 5 per tiles?
2. A room is 5 m 40 cm long and 3 m 75 cm wide. Find area of carpet needed to cover the floor?
3. The area of rectangular field is $650 \mathrm{sq} . \mathrm{cm}$ and one of its side is 30 cm . Find the perimeter?
4. The length and breadth of a play ground are 62 m 60 and 25 m 10 cm respectively. Find the cost of turfing it at Rs 2.50 per sq. m. How long will a man go three times around the field if he walks at the rate 2 m per sec ?
5. A room is 13 m long and 9 m broad. Find the cost of carpeting the room with a carpet 75 cm broad at the rate of Rs 6.50 per m.
6. How many envelops can be made out of a sheet of paper 324 cm by 172 cm if each envelops require a piece of paper of size 18 cm by 12 cm ?

## CLASS $6^{\text {TH }}$ MATHS Chapter. UNITARY MATHOD JSUNIL TUTORIAL, PANJABI COLONY GALI 01

1. A truck runs 495 km on 36 liter petrol. How many km can it run on 35 liter petrol?
2. 12 men can reap a field in 25 days. in how many days can 20 man reap field?
3. In a camp, there were provisions for 425 men for 30 days. However, 375 men attend the camp.

How many provision last?
4. If 48 boxes are needed for 6000 pens. How many boxes will be needed for 1875 pens?
5. A bus travel 36 km in $\frac{2}{3} \mathrm{hr}$. If it maintains a uniform speed, how long will it takes to cover 162 km ? How for does it travel in 8 hrs ?

6 . 25 bags each weighting 40 kg , cost Rs 2750 . Find the cost of 35 bags of wheatif each weighting 50 kg ?
7. 24 workers can build a wall in 15 days. How many days will 9 workers take to build a similar wall?
8. 12 men can repair a road in 28 days. how long will 84 men take to do so?
9. 8 taps having the same rate of flow, fill a tank in 27 minutes. If two taps go out of order, how long will the remaining taps take to fill the tank?
10. 15 pumps can empty a reservoir in 24 hours. In how many hours can 45 such pumps do the same work?
11. A car can finish a certain journey in 9 hrs. The speed of $72 \mathrm{~km} / \mathrm{h}$. By how much should its speed be increased so that it may take only 8hto cover the same distance?
12. A garrison of 500 men had provision for 24days. However a reinforcement of 300 men arrived. Now for how many days the food will last?

## CLASS $6{ }^{\text {TH }}$ MATHS Chapter. Ratio and Proportional-2 JSUNIL TUTORIAL, PANJABI COLONY GALI 01

1. First, second, fourth term of a proportional are $45,25,35$, Find third term.
2. If $36, x, x, 16$ are in proportional Find value of $x$
3. Find value of $x$ if 25,35 , $x$ are in proportional
4. An electrical pole cast shadow length 20 m at a time when a tree of 6 cm cast shadow of 8 m . Find the height of pole.
5. The length of the side of a triangle are in ratio $1: 3: 5$. If perimeter of triangle is 90 cm find its largest side .
6. Rohit earns Rs. 7650 and saves Rs. 918 per month Find ratio of (i)his income to his saving (II) His income to his expenditure (III) his expenditure to his saving
7. Find the ratio of the price of pencil to that of ball pen if pencil cost Rs 96 per score and ball pen cost Rs. 50.40 per dozen.
8. The ratio of the height of Mohit and Rohit is $4: 3$ if Rohit is 1.5 m tall. Find the height of Mohit?
9. Neha got 850 marks out of 1000 marks and Suzie got 375 in 500 . Express their marks in ratio?
10. The ratio of income to expenditure $9: 8$ Find saving, if total income is Rs. 2700 11. Jaya is 1.30 m tall and Shakshi is 1 m 25 cm tall. Find the ratio of their height?

## CLASS $6^{\text {TH }}$ MATHS Algebraic expression <br> JSUNIL TUTORIAL, PANJABI COLONY GALI 01

1. Numerical coefficient of $8 x^{3} y z^{2}$ is $\qquad$
2. Find value: (a) $8-x+y$ if $x=7$ and $y=9$ (b) $6 x-y+30$ if $x=2$ and $y=6$
3. Write like terms from $2 x^{2}, 2 x, 2 x^{3},-5 x, 11 x^{4}$
4. Write numerical coefficient of . $3 x^{3} \mathrm{yza}^{2}$
5. Find area of rectangle with sides $3 x$ and $5 y$
6. Translate two-step verbal expressions into analgebraic expression.
(a) Subtract the sum of $5+\mathrm{x}$ from y (b) Add n and 6 ; then multiply by x (c) 5 times the sum of $20+\mathrm{x}$
7. Subtract $5 x^{2}-4 y^{2}+6 y-3$ from $7 x^{2}-4 x y+8 y^{2}+5 x-3 y$.
8. Add $4 y\left(3 y^{2}+5 y-7\right)$ and $2\left(y^{3}-4 y^{2}+5\right)$
9. Two adjacent side of a rectangle are $5 x^{2}-3 y^{2}$ and $x^{2}-2 x y$ Find its perimeter
10. The perimeter of a triangle is $6 p^{2}-4 p+9$ and two of their adjacent sides are $p^{2}-2 p+1$ and $3 p 2-5 p$ +3 . Find third side of triangle.

## CLASS $6{ }^{\text {TH }}$ MATHS Chapter. Geometry JSUNIL TUTORIAL, PANJABI COLONY GALI 01

1. Draw a circle of radius 5 cm . Draw and measure the largest chord.
2. Using ruler and compass construct angle : $135^{\circ}, 22.5^{\circ}, 45^{\circ}, 90^{\circ}, 112.5^{0}$
3. Draw an angle of 90 and using protector to construct an angle of $60^{\circ}$ by dividing it .
4. Use protector to draw $60^{\circ}$, By dividing into 4 part and draw an angle of $15^{\circ}$
5. What is a triangle? Define all its 6 types.
6. (iv) $<A=<B=<C$ Find Each of them.
7. In a quadrilateral $<A=110^{\circ},<B=70^{\circ},<C=85^{\circ}$. Find the value of $<\mathrm{D}$.
8. In a quadrilateral $\angle B=\angle C=\angle D=85^{\circ}$. Find $<A$
9. Draw a circle of radius 5 cm . Draw and measure the largest chord.
10. Use protector to draw $60^{\circ}$, By dividing into 4 part and draw an angle of $15^{\circ}$
11. In a quadrilateral $<A=110^{\circ}, \angle B=70^{\circ},<C=85^{\circ}$. Find the value of $<D$.
12. In a quadrilateral $\quad \angle \mathrm{B}=\angle \mathrm{C}=\angle \mathrm{D}=85^{\circ}$. Find $<\mathrm{A}$

## CLASS $6^{\text {TH }}$ MATHS Ratio and proportional <br> JSUNIL TUTORIAL, PANJABI COLONY GALI 01

Q1. Find the ratio of 75 paisa and Rs 3
Q2. Find the ratio of 125 gm to 2 kg . ?
Q3. Neha got 850 marks out of 1000 marks and Suzie got 375 in 500 . Express their marks in ratio ?
Q4. The number of boys in school is 500 and that of girls 275 . Find the Ratio of
(i) Boys to that of girls
(ii) Boys to total num of students
(iii) Total num. to that of girls.

Q5 The ratio of the height of Mohit and Rohit is $4: 3$ if Rihit is 1.5 m tall. Find the height of Mohit?
Q6. Jaya is 1.30 m tall and Shakshi is 1 m 25 cm tall. Find the ratio of their height?
Q7. Are $5: 6:: 10: 12$ and $12: 18:: 14: 24$ equivalent?
Q8. Find the value of $x$ :
(i) $\mathrm{X} / 5=6 / 15$
(ii) $7 / 8=21 / X$
(iii) $44: X:: 11: 48$
(iv) $7: X=21: X$

Q9. The ratio of incom to expenditure $9: 8$ Find saving, if total incom is Rs. 2700
Q10. Two numb. are in ratio $2: 7$. If the sum of the num is 81 .Find the numbers ?

Q11. The ratio of boys to girls in a school is $8: 3$ if the num. of boys are 400 find the number of girls.
Q12. Is $3: 5$ equivalent to 4: 6 ? Why or why not?
Q13. The 1st 2nd and 4th term of a proportion al is $6,10,15$. Find the third term?

## CLASS $6^{\text {TH }}$ MATHS MIXED PAPER term-II JSUNIL TUTORIAL, PANJABI COLONY GALI 01

A. Fill in the blanks

1. Demeter of circle is a chord that $\qquad$ the center.
2. A radius is the line segment with one end point ------- and the other end point $\qquad$
3. If we join any two points on the circle by a line segment, we obtain a $\qquad$ of the circle.
4. Any part of a circle is called a $\qquad$ Of the circle
5. The figure bounded by an arc and the two radii joining the end point of arc with the center is called a
$\qquad$ Of the circle
6. An object that occupy space is called a $\qquad$
7. A cuboid has --- faces --- edges and --- vertices
8. The $\qquad$ faces of cuboid are identical
9. A. $\qquad$ has no vertex and edges
10. All the faces of $\qquad$ are identical.
B. Solve these questions
11. In triangle if : (i) $<A=35^{\circ}, \angle B=75^{\circ}$ Find $<C$ (ii) $<\mathrm{A}=\angle \mathrm{B}=75^{\circ}$ Find $<\mathrm{C}$
(iii) $\angle \mathrm{A}=90^{\circ}, \angle \mathrm{B}=\angle \mathrm{C}$ Find $\angle \mathrm{B}$ and $\angle \mathrm{C}$
12. A foot path runs inside the rectangular 38 m and 32 m . If the width of path is runs inside . The width of path is 5 m . Find the area of path?
13. If $36, x, x, 16$ are in proportional Find value of $x$
14. Find the ratio of the price of pencil to that of ball pen if pencil cost Rs 96 per score and ball pen cost Rs. 50.40 per dozen.
15. The ratio of the height of Mohit and Rohit is 4 : 3 . If Rohit is 1.5 m tall. Find the height of Mohit?
16. Neha got 850 marks out of 1000 marks and Suzie got 375 in 500 . Express their marks in ratio?
17. Find the ratio the price of coffee to that of tea, when coffee cost rupees 24 per100 gm and tea Rs 80 per kg?
18. A bus travel 36 km in $\frac{2}{3} \mathrm{hr}$. If it maintains a uniform speed, how long will it takes to cover 162 km ? How for does it travel in 8 hrs . ?
19. How many envelops can be made out of a sheet of paper 324 cm by 172 cm if each envelops require a piece of paper of size 18 cm by 12 cm ?
20. In a quadrilateral $<A=110^{\circ}, \angle B=70^{\circ},<C=85^{\circ}$. Find the value of $<D$.
21. In a quadrilateral $\angle B=\angle C=\angle D=85^{\circ}$. Find $\angle A$
22. If four angles of quadrilateral are 1:2:3:4 Find the measure of each side ?
23. The ratio of the two side of Parallelogram is $3: 4$. Find all four angle of Parallelogram?
24. If two adjacent angle of Parallelogram are in ratio $3: 2$. Find the all four angles of parallelogram
25. The total cost of flooring a room at Rs. 8.50 per sq.meter is Rs. 510 . If the length of the room is 8 m . Find its breadth

## CLASS $6^{\text {TH }}$ MATHS Linear equation <br> JSUNIL TUTORIAL, PANJABI COLONY GALI 01

1. Set up equations and solve them to find the unknown numbers in the following cases:
(a) Add 4 to eight times a number; you get 60.
(b) One fifth of a number minus 4 gives 3 .
(c) If I take three fourths of a number and count up 3 more, I get 21.
(d) When I subtracted 11 from twice a number, the result was 15.
(e) Munna subtracts thrice the number of notebooks he has from 50 , he finds the result to be 8 .
(f) lbenhal thinks of a number. If she adds 19 to it and divides the sum by 5 , she will get 8 .
(g) Anwar thinks of a number. If he takes away 7 from5/2of the number, the result is $11 / 2$.
2. Solve the following:
(a) The teacher tells the class that the highest marks obtained by a student in her class is twice the lowest marks plus 7 . The highest score is 87. What is the lowest score?
(b) In an isosceles triangle, the base angles are equal. The vertex angle is $40^{\circ}$. What are the base angles of the triangle? (Remember, the sum of three angles of a triangle is $180^{\circ}$ ).
(c) Smita's mother is 34 years old. Two years from now mother's age will be 4 times Smita's present age. What is Smita's present age?
(d) Sachin scored twice as many runs as Rahul. Together, their runs fell two short of a double century. How many runs did each one score?
3. Solve the following:
(i) Irfan says that he has 7 marbles more than five times the marbles Parmit has.IIfan has 37 marbles. How many marbles does Parmit have?
(ii) Laxmi's father is 49 years old. He is 4 years older than three times Laxmi's age.What is Laxmi's age?
(iii) Maya, Madhura and Mohsina are friends studying in the same class. In a class test in geography, Maya got 16 out of 25 . Madhura got 20. Their average score was 19. How much did Mohsina score?
(iv) People of Sundargram planted a total of 102 trees in the village garden. Some of the trees were fruit trees. The number of non-fruit trees were two more than three times the number of fruit trees.

What was the number of fruit trees planted?
$(\mathrm{V})$ Find a number, such that one fourth of the number is 3 more than 7.
(vi) The sum of three times a number and 11 is 32 . Find the number.
4. Solve the following equations.
(a) $2(x+4)=12$
(b) $3(n-5)=21$
(c) $3(n-5)=-21$
(d) $3-2(2-y)=7$
(e) $-4(2-x)=9$
(f) $4(2-x)=9$
(g) $4+5(p-1)=34$
(h) $34-5(p-1)=4$
5. Solve the following equations.
(a) $4=5(p-2)$
(b) $-4=5(p-2)$
(c) $-16=-5(2-p)$
(d) $10=4+3(t+2)$
(e) $28=4+3(t+5)$
(f) $0=16+4(m-6)$
(a) $3 n-2=46$ (b) $5 m+7=17$
(c) $\frac{20 p}{3}=40$
(d) $\frac{3 \mathrm{p}}{10}=6$

