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Find the circumference of circle whose radius is 14 cm

Find the circumference of a circle whose radius is 14 cm. (pi= 22/7). Find the circumference and area of a circle whose radius is 14 cm.

The area of a circle is the space occupied by the circle in a two-dimensional plane. Alternatively, the space occupied inside the border / circumference of a circle is called the area of the circle. The formula for the area of a circle is a = ï € R2, where R is the ray of the circle. The area unit is the square unit, for example, M2, CM2, IN2, etc. Circle area = ï € R2 or ï € D2 / 4 in square units, where (pi) ï € = 22/7 or 3.14. PI (ï €) is the circumference ratio to the diameter of any circle. It is a special mathematical constant. The area of a circle formula is useful for measuring the region occupied by a circular field or a plot. Suppose, if you have a circular table, then the area formula will help you know how much cloth is necessary to completely cover. The area formula will also help us know the length of border that is, the circle circumference. A circle has a volume? No, a circle does not have a volume. A circle is a two-dimensional shape, it has no volume. A circle has only one area and perimeter / circumference. We learn in detail on the area of a circle, surface, and its circumference with examples. Circle and parts of a circle circle is a collection of points that are at a fixed distance from the center of the circle. A circle is a closed geometric shape. We see looking for in everyday life like a wheel, pizzas, a circular terrain, etc. The size of the space or region enclosed inside the circle is known as the area of the circle. RADIUS: The distance from the center to a point on the border is called the radius of a circle. Ã represented by the letter "R" or "R". RADIUS plays an important role in the formula for the area and circumference of a circle, which we will learn later. Diameter: A line passing through the center and its endpoints are located on the circle it is called the diameter of a circle. It is represented by the letter 'd' or 'd'. Diameter formula: The formula of a circle diameter is twice its radius. Diameter = 2-RADIUS D = 2R or D = 2R If the diameter of a circle is known, its radius can be calculated as: R = D / 2 or R = D / 2 circumference: circle circumference is The length of its border. This means that the perimeter of a circle is the same as its circumference. The length of the rope that perfectly wraps the border of the circle will be equal to its circumference. The figure below helps you view the same. The circumference can be measured using the date formula: where 'R' is the radius of the circle and ï € is the mathematical constant whose value is approximated to 3.14 or 22/7. The circumference of a circle can be used to find the area of that circle. For a circle with a radius â € œCâ € ™ and Circumference â € ™ â € ™ ï € = circumference / diameter ï € = C / 2R = C / D C = 2ï € R includes the different parts of a circle using the Next example of real life. Consider a park in circular shaped as shown in below. We can identify various partsa circle with the help of the figure and the table below. In a circle In our park Denominated by the letter Centro Fontana F Circonference Confine Ã Chord Input Play Area PQ Distance from the fountain to the entrance gate FA Diameter Straight line Distance between entrance gate and exit gate through the fountain AFB Minor segment The smallest area of the park, which is referred to as Playground Ã Ã Ã Ã Ã larger area of the park, different from the play area Ã Inside of the circle The green area of the whole park Ã Outside of the circle The outside area at the perimeter of the park Ã Arco Any curved part on the circumference. Ã What is the circle area? The area of a circle is the amount of space enclosed within the edge of a circle. The region within the circle is the area occupied by the circle. It can also be indicated as the total number of square units within that circle. Area of the formulas of the circle The area of a circle can be calculated at intermediate steps from the diameter and circumference of a circle. From diameter and circumference, we can find the radius and then the area of a circle. But these formulas provide the shortest method to find the area of a circle. Suppose a circle has a radius 'r' and therefore the circle area = Îår2 or Îd2/4 in square units, where Î = 22/7 or 3,14 and d is the diameter. Area of a circle, A = Îår2 square units Circumference / Perimeter = 2×r units The area of a circle can be calculated using the formulas: Area = > r2, where the radius is. Area = (^/4) > d2, where the diameter is. Area = C2/4Î, where the circumference is. Examples using the Area of Circle formula We consider the following illustrations based on the circle formula area. Example 1: If the radius length of a circle is 4 units. Calculate your area. Solution: Raggio (r) = 4 units (data) Using the formula for the circle area, Area of a circle = φÏr2 Enter the values, A = Ï42 A =Ï; 16 A = 16~~~50,27 Answer: The circle area is 50.27 square units. Example 2: The length of the larger agreement of a circle is 12 units. Find the circle area. Solution: Diameter (d) = 12 units (data) Using the formula for the circle area, Area of a circle = (¡/4) Ã'd2 Enter values, A = (¡/4) Ã'122 A = (Ï/4) Ã'144 A = 36ïåàâãäåâãäåâãäåâãäåâãäåâãäåâãäåâãäåâ The circle area is 113.1 square units. Area of a circle using the diameter The area of the shape of the circle in terms of diameter is: Area of a circle = Ïd2/4. Here is the diameter of the circle. The diameter of the circle is double the radius of the circle. d = 2r. Generally from the diameter, we must first find the radius of the circle and then find the area of the circle. With this formula, we can directly find the circle area, from the diameter measurement of the circle. The area of a circle using circumference The area of a circular formula inof circumference is given by the formula formula There are two simple steps to find the area of a circle from the given circumference of a circle. The circumference of a circle is first used to find the radius of that circle. This radius is further useful to find the area of a circle. But in these formulas, we'll be able to find the area of a circle directly from the circumference of the circle. Area of a circle calculation The area of the circle can be conveniently calculated from the radius, diameter or circumference of the circle. The constant used in the calculation of the area of a circle is PI, and has a fractional numerical value of 22/7 or a decimal value of 3.14. One of the PI values can be used according to the requirement and need of the equations. The table below shows the list of formulas if we know the radius, diameter or circumference of a circle. Area of a circle when the radius is known. It is r2 area of a circle when the diameter is known. Ã'¬ D2/4 Area of a circle when the circumference is known. C2 / 4Ã' ã'¬ Derivation of the area of a circle Why is the area of the circle ã'¬ r2? To figure this out, we understand for the first time how we derive the formula for the area of a circle. Look carefully at the figure above, if we divide the circle into smaller sections and arrange them systematically forms a shape of a parallelogram. When the circle is divided into even smaller sectors, it gradually becomes the shape of a rectangle. The more the number of sections it has the more it tends to have a shape of a rectangle as shown above. The area of a rectangle is = length Ã-larth the width of a rectangle = radius of a circle (R) When we compare the shape of a rectangle and the circumference of a circle we can see that the length is = Ã1/2 the circumference of an area of the circle of circle = area of the rectangle size = Ãe ã'¬ (2Ã' ã'¬ r) Therefore, the area of the circle is Ã' ã'¬ r2, where r, is the radius of the circle and the value of Ã' is 22/7 or 3.14. Surface of the formula of the circle The surface area of the surface of a circle is the same as the area of a circle. In fact, when we say the area of a circle, we mean nothing but its total area. The surface is the area occupied by the surface of a 3-D shape. The surface of a sphere will be spherical in shape but a circle is a simple 2-dimensional shape of the plane. If you give the length of the radius or the diameter or even the circumference of the circle, then we can find out the surface. It is represented in square units. The surface of the formula of the circle = Ã' Ã' R2 where 'R' is the radius of the circle and the value of Ã' Ã' is about 3.14 or 22/7. Example of the real world on the circle Ron and his friends ordered a pizza on Friday night. Each slice was 15 cm long. Calculate the area of pizza Ron ordered. You can assume that the length of the slice of the pizza is equal to the radius of the pizza. Solution: a pizza is in circulate. So we can use the area of a formula of circle to calculate the area of the pizza. The radius is 15 cm of circular of Formula = Ã Ã|R2 = 3.14 ÃƒÂ· 15 = 706.5 Pizza surface = 706.5 cm square. Example 1: Find the circumference and the area of a circle of 14 cm. Solution: Given: Rage of the circle = 14 cm Circle circumference = 2Ã Ã|r = 2 ÃƒÂ· 22/7 ÃƒÂ· 14 = 2 Ã· 22 ÃƒÂ· 2 = 88 cm Use area of the formula Circle = Ã Ã|r2 = 22/7 ÃƒÂ· 14 = 22 ÃƒÂ· 14 = 22 ÃƒÂ· 2 ÃƒÂ· 14 = 616 square meters. cm. Area of the Circolo = 616 square meters. cm. Example 2: the ratio of the area of 2 circles is 4: 9. With the help of the circle area formula find the relationship of their rays. Solution: Suppose the following: the radius of the 1st circle = R1 area of the 1st circle = A1 the radius of the 2nd circle = R2 area of the 2nd circle = A2 the radius of the 1st circle = A1 area of the 1st circle = A1 A2: A2 = 4: 9 area of the circle = Ã Ã¡Ã¡Ã¡r2 Ã Ã¡Ã¡Ã¡Ã¡ã ¡ã ã¡A1 (r :2) 2 = 4: 9 Taking the square roots of both sides, R1: R2 = 2: 3 Therefore, the ray ratio = 2: 3 Example 3: A race track has the shape of a circular ring. The internal ray of the track is 58 yd and the outer radius is 63 yd. Find the track area. Solution: Given: r = 63 yd, r = 56 yd. The external circle area must be A1 and the area of the internal circle A2 track area = A1 â € "A2 = Ã Ã¡Ã¡Ã¡R2 â € â € Ã Ã R2 = Ã Z (632 â € "562) = 22/7 ÃƒÂ· 833 = 2.618 square yards. Therefore, the track area is 2618 square meters. Example 4: A thread has the shape of an equilateral triangle. Each side of the triangle measures 7 inches. The thread is folded in a circle shape. Find the area of the circle that forms. Solution: perimeter of the equilateral triangle = circumference of the formed circle. Thus, the perimeter of the triangle is 21 inches. From the perimeter of the equilateral triangle = circumference of the formed circle. Thus, the perimeter of the triangle = 3 ÃƒÂ· side = 3 ÃƒÂ· 7 = 21 inches. Circumference of a circle = 2Ã âær = 2 ÃƒÂ· 22/7 ÃƒÂ· r = 21. r = (21 ÃƒÂ· 7) / (44) = 3.34. Therefore, the ray of the circle is 3.34 cm. Area of a circle = Ã Ã|r2 = 22/7 ÃƒÂ· (3.34) 2 = 35.042 square inches. Therefore, the area of a circle is 35.042 square inches. Example 5: The time indicated in a circular clock is 15:00. The length of the minute hand is 21 units. Find the distance traveled by the tip of the minute hand when it is 15:30. Solution: when the minute hand is at 3.30 pm, it covers half of the circle. Then, the distance traveled by the minute hand is actually half of the circumference. Distance \ (= \ pi \) (where r is the length of the minute hand). Then the distance traveled = 22/7 Ã- 21 = 22 Ã- 3 = 66 units. Therefore, the distance is 66 units. Show more> go to slidego slidego to slidego to slidego to slide Let your child solves the challenges of real life with applied mathematics Make your child to school concepts learned in the real world with the help of our experts. Book a free trial FAQ on the area of the circle Là area of the circle is calculated using the following formula: Area = Ã Ã Ã Ã| r2, where â r 'is the radius. Area = (Ã Ã¡ / 4) Ã d2, where â d 'is the radius. Area = C2 / 41, where â C 'is circumference. So it is the circle area Area of circle formula = Ã' ã'¬ Ã- r2. The area of a circle is ã'¬ multiplied by the square of the radius. The area of a circle when the radius 'R' is given is ã' r2. The area of a circle when the diameter 'D' is known is ã'¬ D2 / 4. It is about 3.14 or 22/7. The area (A) could also be found using the formulae A = (Ã' ã'¬ / 4) Ã-d2, where 'D' is the radius and A = c2 / 4Ã' ã'¬, where 'c' is the given circumference. What is the perimeter and area of a circle? The circumference of the circle can be taken as it is ã' times the diameter of the circle. And the area of the circle is is and times the square of the radius of the circle. How to calculate the area of a circle with diameter? The diameter of the circle is twice the radius of the circle. So the area of the formula of the circle using the diameter is equal to Ã' / 4 times the square of the diameter of the circle. The formula for the area of the circle, using the diameter of the circle ã'¬ / 4 Ã€- diameter2. How do you find the area of a circle given its circumference? The area of a circle can also be found using the circumference of the circle. The radius of the circle can be found from the circumference of the circle and this value can be used to find the area of the circle. Suppose the circumference of the circle is "c." We have c = 2Ã' ã'¬ r, or r = c / 2Ã' ã'¬. applying this value "C" in the formula of the area we have A = Ã' ã'¬ R2 = Ã' ã'¬ Ã- (c / 2Ã' ã'¬) 2 = c2 / 4Ã' ã'¬. ã'¬. The circle area with a radius of 3 m? The area of a circle is multiplied by the square of the ray. The area of a circle (A) in which the radius «r» is Ï¡r2. It is about 3,14 or 22/7. Therefore, area = 3,14 > 3 > 3 = 28,26 square meters. The circumference of a circle is 16 cm. What's your area? Circumference of a circle = 16 cm We know the circumference formula, C = 2±1⁄4r So, 2±1⁄4r = 16 o r = 16/2− = 8/− By replacing the value of 'r' in the circle formula area, we obtain: A = > cm.