Perimeter, Circumference, and Area Assignment Part 1

Fill in each blank with the correct formula.

1. the area of a circle: \( A = \) _______________________

2. the area of a triangle: \( A = \) _______________________

3. the area of a parallelogram: \( A = \) _______________________

4. the circumference of a circle: \( C = \) _______________________

5. Suzanne is making a frame for an 8-inch by 10-inch photo. How much wood does she need for the frame?

6. The diameter of a quarter is 24 mm. What is the quarter’s circumference?

7. The floor of our classroom is 50 feet by 75 feet. What is the area of our floor?

8. Each tire on your bicycle has a diameter of 26 inches. About how far will you travel when the tires make on complete revolution?

9. Lisa is covering a rectangular table with small square tiles. It will take 32 rows of tiles with 48 tiles in each row. How many tiles are needed to cover the table?

Use the figure below to answer questions 10 and 11.

10. What is the perimeter of this compound figure?

11. What is the area of this compound figure?
12. Find the area of the shaded region.

13. Find the area of the shaded region.

14. Susan makes a rectangular rug that has an area of 300 square inches and a width of 15 inches. What is the length of the rug?

15. What is the total length of weather stripping needed for 12 windows that each measure 90 cm by 12 cm?

16. The radius of a tire is 1.2 feet. How far will you travel after ten complete rotations of the tire?

17. A bicycle tire rim has a diameter of 24.5 inches, and the tire is 2.25 inches thick. Find the circumference of the outside of the tire.

18. You ride a Ferris wheel that has a circumference of 108 feet. Estimate the diameter of the Ferris wheel.

19. A park is 300 yds by 500 yds. There is a 4 wide foot walking path going around the entire perimeter of the park. The rest of the park is green space. How much green space is there in the park?
Perimeter, Circumference, and Area Assignment Part 1

ANSWERS

Fill in each blank with the correct formula.

1. the area of a circle: \( A = \pi r^2 \)

2. the area of a triangle: \( A = \frac{1}{2} b h \)

3. the area of a parallelogram: \( A = b \times h \)

4. the circumference of a circle: \( C = 2\pi r \)

5. Suzanne is making a frame for an 8-inch by 10-inch photo. How much wood does she need for the frame?
   
   36 in

6. The diameter of a quarter is 24 mm. What is the quarter’s circumference?
   
   75.39 mm

7. The floor of our classroom is 50 feet by 75 feet. What is the area of our floor?
   
   3,750 \( ft^2 \)

8. Each tire on your bicycle has a diameter of 26 inches. About how far will you travel when the tires make one complete revolution?
   
   81.68 in

9. Lisa is covering a rectangular table with small square tiles. It will take 32 rows of tiles with 48 tiles in each row. How many tiles are needed to cover the table?
   
   1,536 Tiles

Use the figure below to answer questions 10 and 11.

[Diagram of a complex figure with measurements]
Perimeter, Circumference, and Area Assignment Part 1

10. What is the perimeter of this compound figure?  
   \[52\text{ft}\]

11. What is the area of this compound figure?  
   \[128\text{ft}^2\]

12. Find the area of the shaded region.  
   \[64\text{in}^2\]

13. Find the area of the shaded region.  
   \[85.85\text{km}^2\]

14. Susan makes a rectangular rug that has an area of 300 square inches and a width of 15 inches.  What is the length of the rug?  
   \[20\text{in}\]

15. What is the total length of weather stripping needed for 12 windows that each measure 90 cm by 12 cm?  
   \[1,224\text{cm}\]

16. The radius of a tire is 1.2 feet.  How far will you travel after ten complete rotations of the tire?  
   \[7.53\text{ft}\]

17. A bicycle tire rim has a diameter of 24.5 inches, and the tire is 2.25 inches thick.  Find the circumference of the outside of the tire.  
   \[91.1\text{in}\]

18. You ride a Ferris wheel that has a circumference of 108 feet.  Estimate the diameter of the Ferris wheel.  
   \[34.37\text{ft}\]

19. A park is 300 yds by 500 yds.  There is a 4 wide foot walking path going around the entire perimeter of the park.  The rest of the park is green space.  How much green space is there in the park?  
   \[143,664\text{yd}^2\]