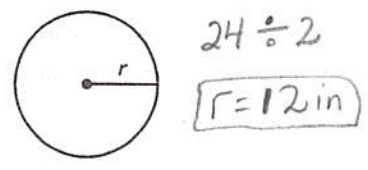


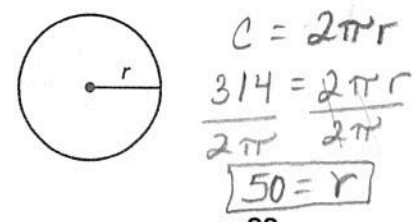
Chapter 8

Write and solve an equation to find the missing dimension of the circle.

1. Diameter = 24 in.

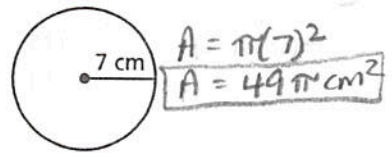


2. Circumference = 314 m

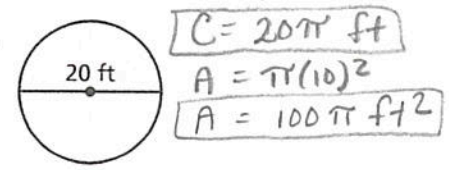


Find the circumference and area of the circle. Use 3.14 or $\frac{22}{7}$ for π .

3. $C = \pi d$
 $C = 14\pi \text{ cm}$



4.



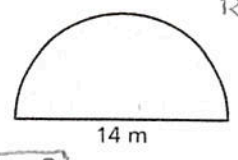
5. The radius of a circle is 18 meters. What is the diameter? 36 m

$C = \pi(10)$
 $C = 31.4 \text{ in}$

6. Your kitchen clock has a radius of 5 inches. What is the circumference?

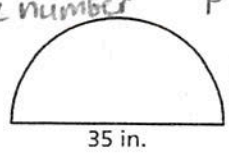
Find the perimeter and area of the semicircle.

7. $P = \frac{\pi(14)}{2} + 14$
 $P \approx 36 \text{ m}$
 $A = \frac{\pi(7)^2}{2} = 77 \text{ m}^2$



Round to whole number

8.



$P = \frac{\pi(35)}{2} + 35$
 $P \approx 90 \text{ in}$
 $A = \frac{\pi(17.5)^2}{2}$
 $A \approx 481 \text{ in}^2$

9. The top of a glass coffee table is a circle. The circumference is 15.7 feet. Rounded to tenth

- What is the radius of the table?
- What is the area of the table?

$C = \pi d$
 $\frac{15.7}{\pi} = \frac{\pi d}{\pi}$
 $d = 5$
 $r = 2.5 \text{ ft}$

$A = \pi(2.5)^2$
 $A \approx 19.6 \text{ ft}^2$

10. You want to find the diameter of a large circular fountain in the park, but cannot measure straight across. Explain how you could use the circumference of the fountain to estimate the diameter.

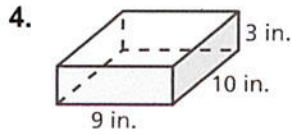
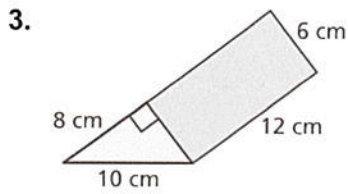
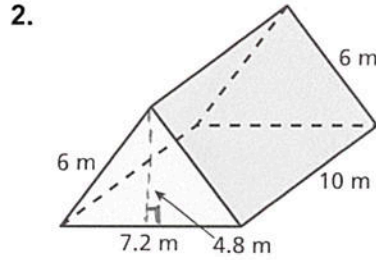
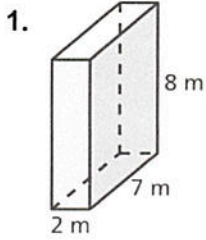
Measure the circumference of the fountain and divide by π .

Answers

- _____
- _____
- _____
- _____
- _____
- _____
- _____
- _____
- a. _____
b. _____
- See left.

9.1

Find the surface area of the prism.



Find the surface area of the cylinder. Round your answer to the nearest tenth.

