Name: _____ no. _____

Find the area of a circle of diameter 70 centimetres. Take $\pi = \frac{22}{7}$.

Solution:

Radius of the circle $= \frac{\text{diameter}}{2}$

$= \frac{70}{2}$

$= 35$ cm

Area of the circle $= \pi r^2$

$= \frac{22}{\cancel{7}} \times \overset{5}{\cancel{35}} \times 35$

$= 22 \times 5 \times 35$

$= 3{,}850$ cm^2

Answer: The area of the circle is **3,850 square centimetres.**

Circumference $= \pi \times 2 \times r = \pi \times D$ Area $= \pi \times r \times r = \pi \times r^2$ Take $\pi = \frac{22}{7}$

For the given radii and diameters of each circle, solve for the circumference and area. Round your answer to two decimal places.

a) radius = 7 cm circumference = _____cm area = _____cm^2

b) diameter = 105 cm circumference = _____cm area = _____cm^2

c) radius = 3.5 m circumference = _____m area = _____m^2

d) diameter = 56 m circumference = _____m area = _____m^2

e) radius = 14 cm circumference = _____cm area = _____cm^2

f) diameter = 21 cm circumference = _____cm area = _____cm^2

LIVEWORKSHEETS