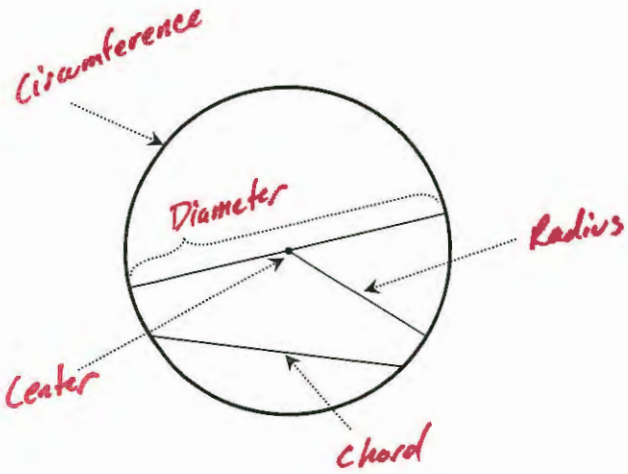
Name Answers Date

Geometry – Circumference of Circles

1) Name the parts of the circle



2) Complete the following:

$\sqrt{1} =$ 1
$\sqrt{4} =$ 2
$\sqrt{9} =$ 3
$\sqrt{16} =$ 4
$\sqrt{25} =$ 5
$\sqrt{36} =$ 6
$\sqrt{49} =$ 7
$\sqrt{64} =$ 8
$\sqrt{81} =$ 9
$\sqrt{100} =$ 10
$\sqrt{121} =$ 11
$\sqrt{144} =$ 12
$\sqrt{169} =$ 13
$\sqrt{196} =$ 14

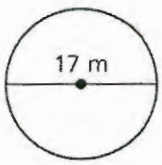
Complete the following:

3) To find the circumference of a circle, you would use the formula πd or $2\pi r$.

4) To find the area of a circle, you would use the formula πr^2.

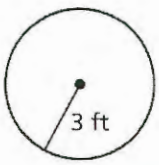
Find the circumference of the circle. Use 3.14 or $\frac{22}{7}$ for π.

5)



$C = \pi d$
$= 3.14 \cdot 17$
$= 53.38$ m

6)



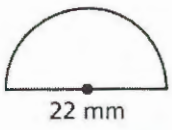
$C = 2\pi r$
$= 2 \cdot 3.14 \cdot 3$
$= 18.84$ ft

7)

$C = 2\pi r$
$= 2 \cdot 3.14 \cdot 14$
$= 87.92$ in

Find the perimeter of the semicircular region.

8)



$C = \pi d$

$= 3.14 \cdot 22$

$= 69.08$

Perimeter $= \frac{1}{2}(69.08) + 22$

$= 34.54 + 22$

$= 56.54$ mm

9)

$C = 2\pi r$

$= 2 \cdot 3.14 \cdot 4$

$= 25.12$

Perimeter $= \frac{1}{2}(25.12) + 8$

$= 12.56 + 8$

$= 20.56$ in

Complete the following. Show all algebraic work.

10) Find the circumference of a circular hot tub that has a diameter of 12 feet.

$C = \pi d$

$= 3.14 \cdot 12$

$= 37.68$ ft

11) Find the circumference of a circle that has a *radius* of 4.5 feet.

$C = 2\pi r$

$= 2 \cdot 3.14 \cdot 4.5$

$= 28.26$ ft

12) Find the circumference of a circle that has a diameter of 6.2 feet.

$C = \pi d$

$= 3.14 \cdot 6.2$

$= 19.468$ ft

13) Find the *diameter* of a circle that has a circumference of 25.12 ft.

$C = \pi d$

$\frac{25.12}{3.14} = \frac{3.14d}{3.14}$

$d = 8$ ft