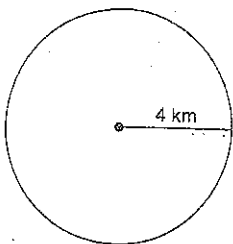


Circumference and Area (WKST 9.1)

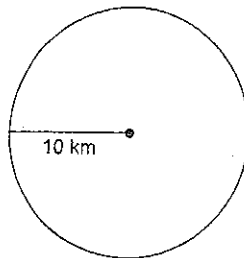
Find the area of each.

1)



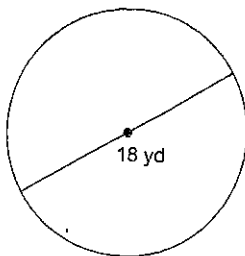
$$A = 16\pi = 50.3 \text{ km}^2$$

2)



$$A = 314.2 \text{ km}^2$$

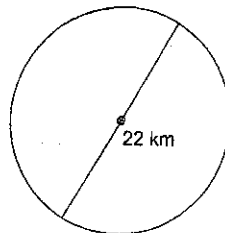
3)



$$r = 9$$

$$A = 254.5 \text{ yd}^2$$

4)



$$A = 380.1 \text{ km}^2$$

5) circumference = 22π ft

$$r = 11$$

$$A = 380.1 \text{ ft}^2$$

6) circumference = 20π m

$$r = 10$$

$$A = 314.2 \text{ m}^2$$

7) circumference = 18π mi

$$r = 9$$

$$A = 254.5 \text{ mi}^2$$

Find the circumference of each circle.

8) radius = 5 mi

$$C = 2(5)\pi$$

$$C = 10\pi = 31.4 \text{ mi}$$

9) radius = 7 mi

$$C = 14\pi$$

$$C = 44$$

10) area = $121\pi \text{ yd}^2$

$$\frac{121\pi}{\pi} = \frac{\pi r^2}{\pi}$$

$$121 = r^2$$

$$r = 11$$

$$C = 69.1 \text{ yd}$$

11) area = $25\pi \text{ in}^2$

$$25\pi = \pi r^2$$

$$25 = r^2$$

$$r = 5$$

$$C = 10\pi$$

OR

$$C = 31.4 \text{ in}$$

12) area = $16\pi \text{ ft}^2$

$$16\pi = \pi r^2$$

$$16 = r^2$$

$$r = 4$$

$$C = 8\pi$$

$$C = 25.1 \text{ ft}$$

13) area = $100\pi \text{ yd}^2$

$$100\pi = \pi r^2$$

$$r = 10$$

$$C = 20\pi$$

$$C = 62.8 \text{ yd}$$

Find the diameter of each circle.

14) circumference = $10\pi \text{ km}$

$$d = 10$$

15) circumference = $6\pi \text{ km}$

$$d = 6$$

16) circumference = $8\pi \text{ mi}$

$$d = 4$$

17) circumference = $14\pi \text{ yd}$

$$d = 7$$

18) area = $144\pi \text{ mi}^2$

$$144\pi = \pi r^2$$

$$r = 12$$

$$d = 24$$

19) area = $36\pi \text{ km}^2$

$$36\pi = \pi r^2$$

$$r = 6$$

$$d = 12$$

20) area = $16\pi \text{ ft}^2$

$$16\pi = \pi r^2$$

$$r = 4$$

$$d = 8$$

21) area = $121\pi \text{ mi}^2$

$$121\pi = \pi r^2$$

$$r = 11$$

$$d = 22$$