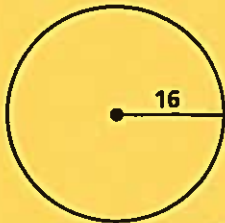Name ___Kay___ Class_____ Date_____
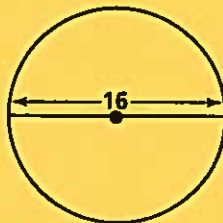
Practice 10-6

Find the circumference of each circle. Leave your answers in terms of π.

1.

16

$C = 32\pi$

2.

16

$C = 16\pi$

3.
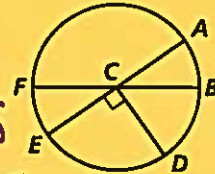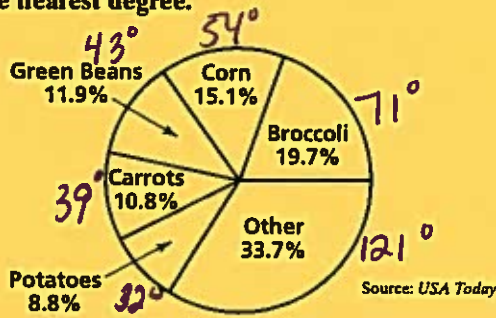
3.9

$C = 7.8\pi$

In $\odot C$, $\overline{EA}$ and $\overline{FB}$ are diameters. Identify the following.

4. two major arcs $\overarc{FEA}, \overarc{BEA}$ 5. two minor arcs $\overarc{AB}, \overarc{BD}$

6. two semicircles $\overarc{FCB}, \overarc{ACE}$ 7. a pair of adjacent arcs $\overarc{AB} : \overarc{BD}$

8. an acute central angle   9. an obtuse central angle $\angle BCE$
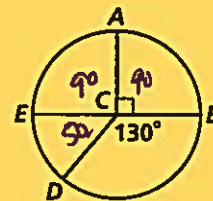 $\angle ACB$

A market research survey found that adults' favorite vegetables are
as shown below. Find the measure of the central angle for each of the
following vegetables. Give your answers to the nearest degree.

10. potatoes $32°$

11. green beans $43°$

12. corn $54°$

13. carrots $39°$

14. broccoli $71°$

43° 54°
Green Beans   Corn
11.9%   15.1%   71°
         Broccoli
         19.7%
39° Carrots
    10.8%
         Other
         33.7%   121°
Potatoes
8.8% 32°   Source: USA Today

Find the measure of each arc in $\odot C$.

15. $\overarc{AE}$ $90°$ 16. $\overarc{ED}$ $50°$

17. $\overarc{DBA}$ $220°$ 18. $\overarc{AED}$ $140°$

19. $\overarc{ABD}$ $220°$ 20. $\overarc{BD}$ $130°$

A
90° 90
E C B
50° 130°
D

Find the length of each arc. Leave your answers in terms of π.

21. $\overarc{AB}$

A
O
24 in. B

$\dfrac{90}{360} \cdot 2\pi(12)$

$= 6\pi$ in

22. $\overarc{CDE}$

D 9 cm C
P 40° E

$\dfrac{40}{360} \cdot 2\pi(9)$

2π

23. $\overarc{FH} = 135°$

F
90
Q 45° G
3 m H

$\dfrac{135}{360} \cdot 2\pi(3)$

2.25π