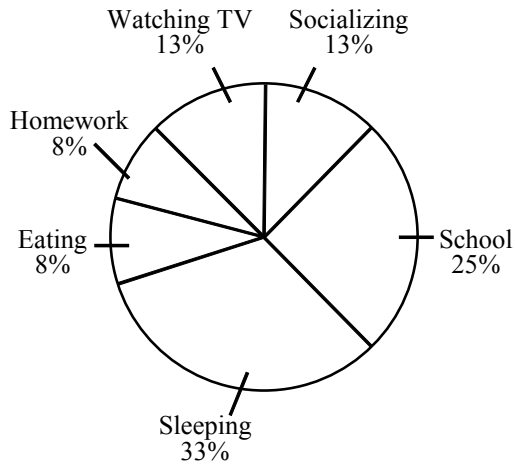


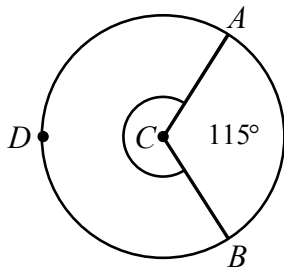
1. Grade 7 students were surveyed to determine how many hours a day they spent on various activities. The results are shown in the circle graph below. Find the measure of each central angle in the circle graph.

- a. Sleeping
- b. Eating

How Students Spend Their Time



2. Name the minor arc and find its measure.



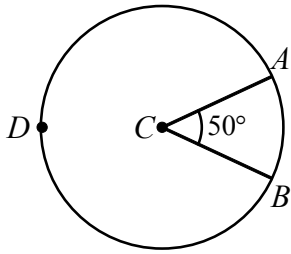
[A] $m\widehat{ADB} = 245$

[B] $m\widehat{ADB} = 230$

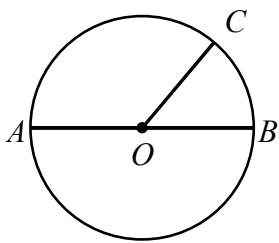
[C] $m\widehat{AB} = 115$

[D] $m\widehat{AB} = 245$

3. Name the major arc and find its measure.



4. In circle O , \overline{AB} is a diameter and $m\widehat{BC} = 50$. Find $m\widehat{CAB}$.



[A] 50

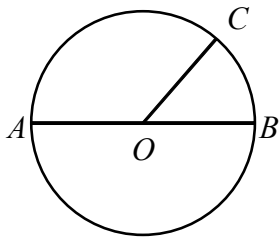
[B] 130

[C] 310

[D] 230

www.TUTOR-USA.com

5. Given: \overline{AB} is the diameter of circle O and $m\widehat{BC} = 49$. Find $m\widehat{CAB}$.



6. Find the circumference of a circle with a diameter of 7 cm. Use $\pi = 3.14$.

[A] 10.14 cm

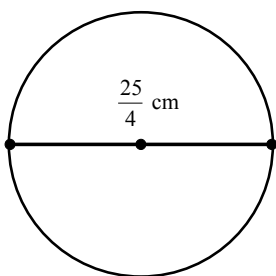
[B] 21.98 cm

[C] 43.96 cm

[D] 10.99 cm

www.TUTOR-USA.com

7. Find the circumference of the circle. Use $\frac{22}{7}$ as an approximation of π .



[A] $9\frac{23}{28}$ cm

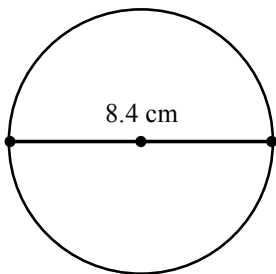
[B] $39\frac{2}{7}$ cm

[C] $19\frac{9}{14}$ cm

[D] $20\frac{9}{14}$ cm

www.TUTOR-USA.com

8. Find the circumference of the circle. Use 3.14 as an approximation of π .



9. For a circle of radius 13 feet, find the arc length of a central angle of 24° . Leave your answer in terms of π .

10. For a circle of radius 6 feet, find the arc length of a central angle of 12° .

[A] $\frac{6}{5}\pi$ ft

[B] $\frac{4}{5}\pi$ ft

[C] 72π ft

[D] $\frac{2}{5}\pi$ ft

www.TUTOR-USA.com

11. If the circumference of a circle is 48π cm, what is the radius?

12. Jill ran 6 times around a circular track that has a diameter of 50 m. Approximately how far did she run? Use $\pi = 3.14$ and round your answer to the nearest meter.

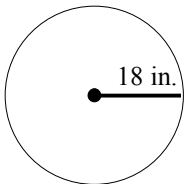
[A] 1413 m

[B] 1963 m

[C] 471 m

[D] 942 m

13. Find the circumference of the circle in terms of π .



[A] 324π in.

[B] 36π in.²

[C] 34π in.

[D] 36π in.

14. A team in science class placed a chalk mark on the side of a wheel and rolled the wheel in a straight line until the chalk mark returned to the same position. The team then measured the distance the wheel had rolled and found it to be 40 cm. To the nearest tenth, what is the area of the wheel?

15. The circumference of a circle is 68π cm. Find the diameter, the radius, and the length of an arc of 90° .

www.TUTOR-USA.com

16. A bicycle mechanic wants to put a strip of plastic between the tube and tire of a 26-inch diameter bicycle tire. To the nearest inch, how long should the strip of plastic be?

17. The diameter of a basketball rim is 18 inches. A standard basketball has a circumference of 30 inches. About how much room is there between the ball and the rim in a shot in which the ball goes in exactly in the center of the rim?

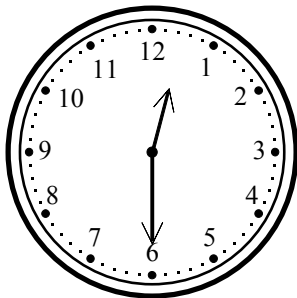
[A] 8.45 in.

[B] 4.78 in.

[C] 4.2 in.

[D] none of these

18. What is the minor arc measure formed by the hour and minute hands at 12:30?



[A] 15°

[B] 345°

[C] 165°

[D] 195°

[1] a. 118.8
b. 28.8

[2] [C]

[3] $m\widehat{ADB} = 310$

[4] [C]

[5] 311

[6] [B]

[7] [C]

[8] 26.376 cm

[9] $\frac{26}{15}\pi$ ft

[10] [D]

[11] 24 cm

[12] [D]

[13] [D]

[14] 127.3 cm^2

[15] 68 cm; 34 cm; 17π cm

[16] 82 in.

[17] [C]

[18] [C]