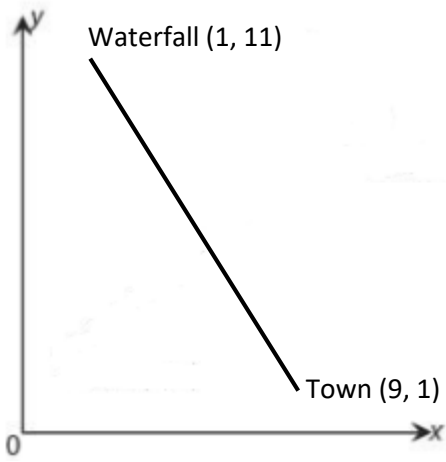
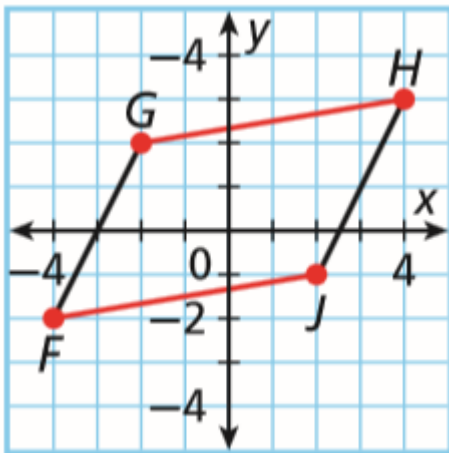


Q2 Benchmark Practice Questions

1. The sketch shows the path along the river from town to the waterfall. Layla walks $\frac{1}{4}$ of the way from town toward the waterfall and has lunch at the first picnic area. What are the coordinates of the picnic area?



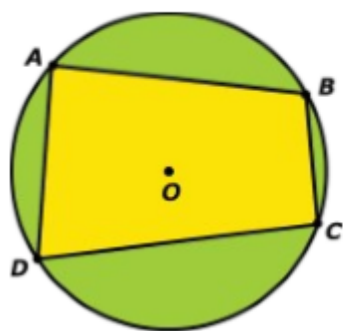
2. Find the perimeter of the parallelogram rounded to the nearest tenth.



3. Write the equation of the line that is parallel to $3x + 5y = 10$ and passes through $(15, -3)$.
4. Write the equation of the line that is perpendicular to $2y - 6x = -16$ and passes through $(9, -5)$.

5.

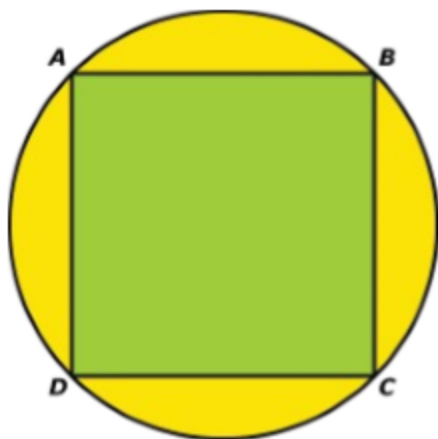
Quadrilateral $ABCD$ is inscribed in circle O . If $m\angle A = 88^\circ$, what is $m\angle C$?



- A. 88°
- B. 90°
- C. 92°
- D. Cannot be determined.

6.

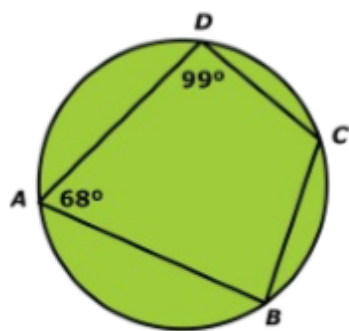
The quadrilateral, $ABCD$, is inscribed in a circle. Using the diagram below, which of the following angles would be supplementary?



- A. $m\angle A + m\angle D$ and $m\angle B + m\angle C$
- B. $m\angle A + m\angle C$ and $m\angle B + m\angle D$
- C. $m\angle A + m\angle B$ and $m\angle C + m\angle D$
- D. $m\angle A + m\angle B + m\angle C + m\angle D$

7.

Quadrilateral $ABCD$ is inscribed in a circle. The measure of $\angle A$ is 68° and the measure of $\angle D$ is 99° .

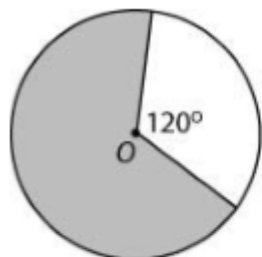


Complete the table below with measures of $\angle B$ and $\angle C$

Angle	Measure
$\angle B$	_____ °
$\angle C$	_____ °

8.

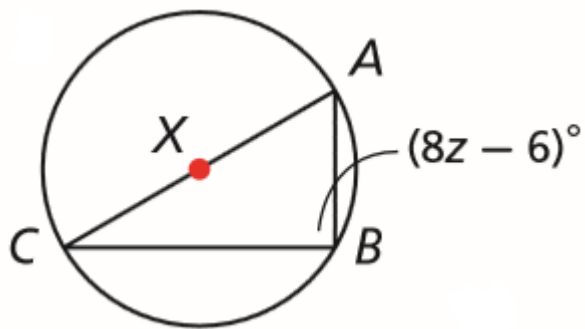
In the figure below, circle O has a central angle of 120° .



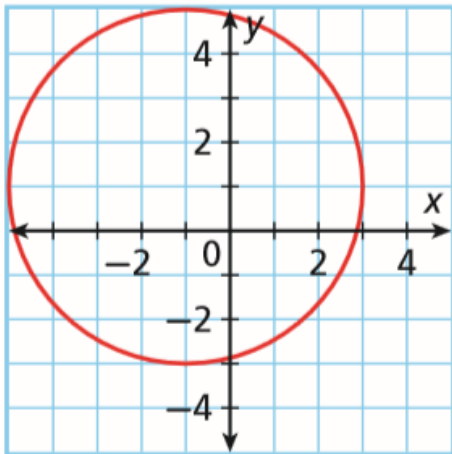
What is the area of the shaded sector of circle O in terms of r , the radius?

- A. $\frac{1}{3} \pi r^2$ square units
- B. $\frac{2}{3} \pi r$ square units
- C. $\frac{2}{3} \pi r^2$ square units
- D. $\frac{4}{3} \pi r$ square units

9. Find the value of z .



10. Write the equation of the circle in standard form



11.

Convert each measure from radians to degrees.

A. $\frac{2\pi}{3}$

B. $\frac{\pi}{6}$

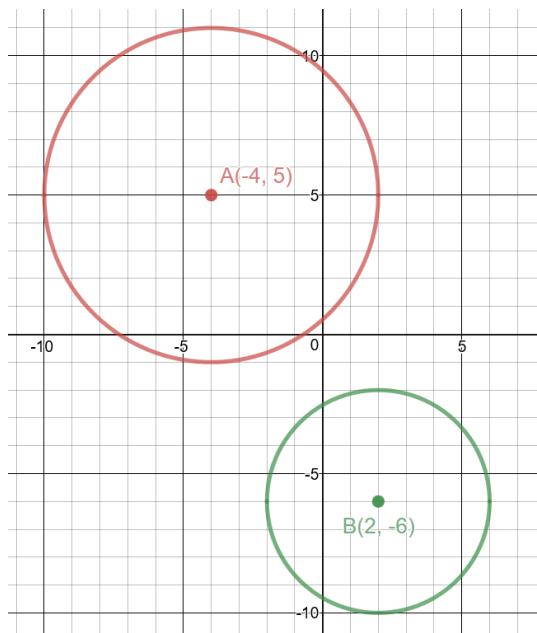
12.

Convert each measure from degrees to radians.

A. 85°

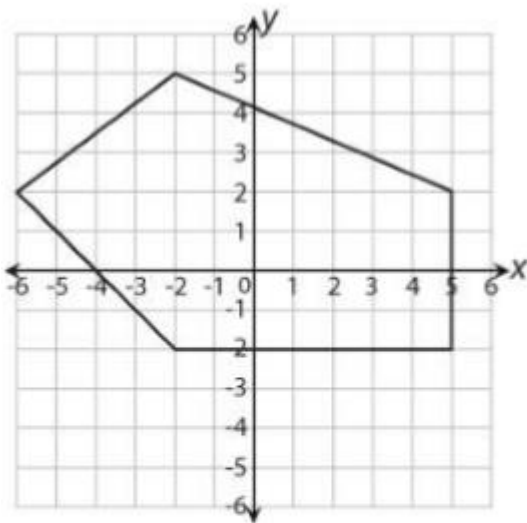
B. 90°

13. Show the circles are similar by stating the necessary transformations from circle A to circle B.



14.

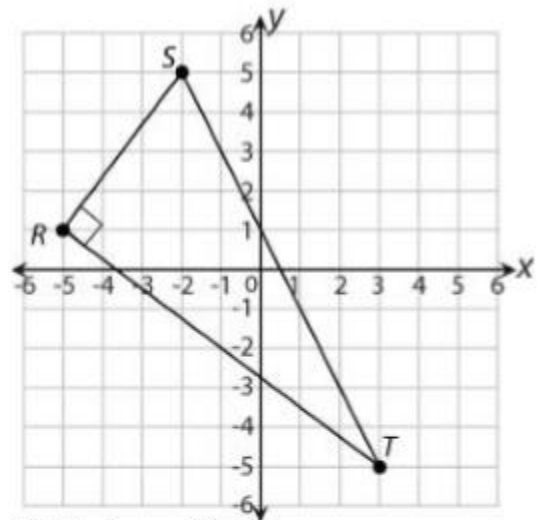
To the nearest unit, what is the perimeter of this pentagon?



- A. 27 units
- B. 29 units
- C. 30 units
- D. 34 units

15.

Look at the right triangle below.



What is its area?

- A. 25 square units
- B. 26 square units
- C. 40 square units
- D. 50 square units