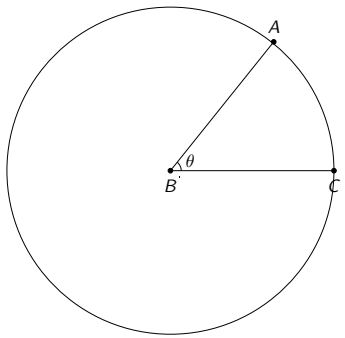
Excercise

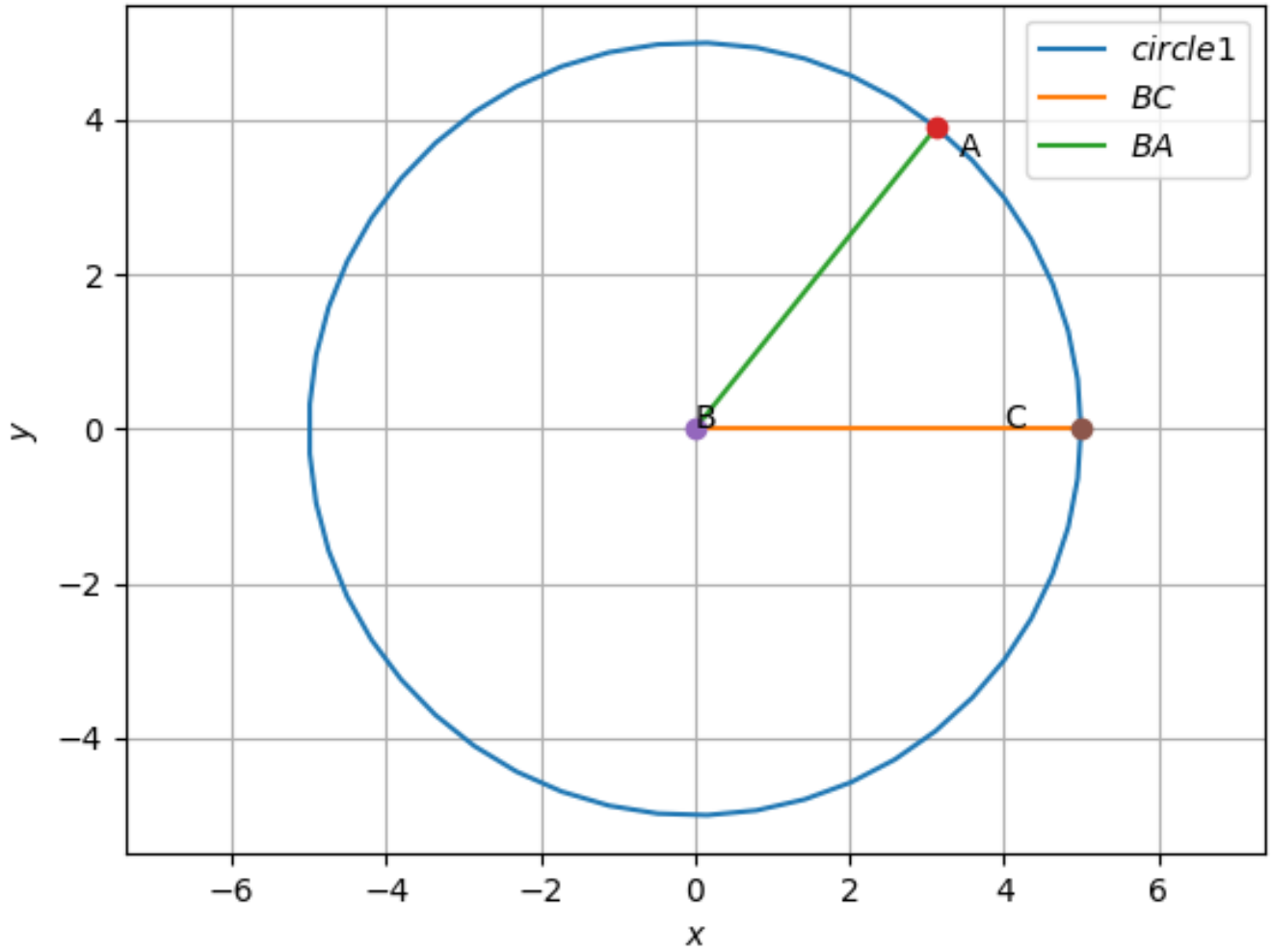
Pratibha

3 Jan 2020

1. The length of the minute hand of a clock is 14 cm. Find the area swept by the minute hand in 5 minutes.

- **Solution** :




circle1
BC
BA
A
B
C
4
2
0
−2
−4
−6
−4
−2
0
2
4
6
y
x

In 60 minutes minute hand covers 360°
For 5 minutes $6^\circ \times 5 = 30^\circ$
Here $\theta = 30^\circ$ and r = 14cm

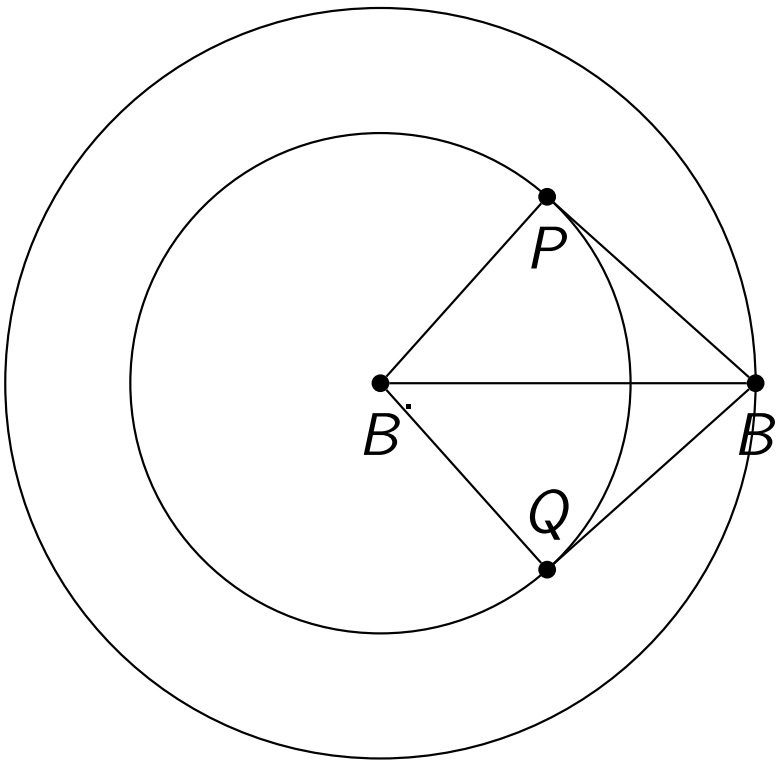
$$\text{Area of sector} = \frac{\theta}{360} \times \pi r^2 = 51.31 cm^2.$$

https://github.com/pratibha444/GEOMETRY/blob/master/CODES/circle/circon.py

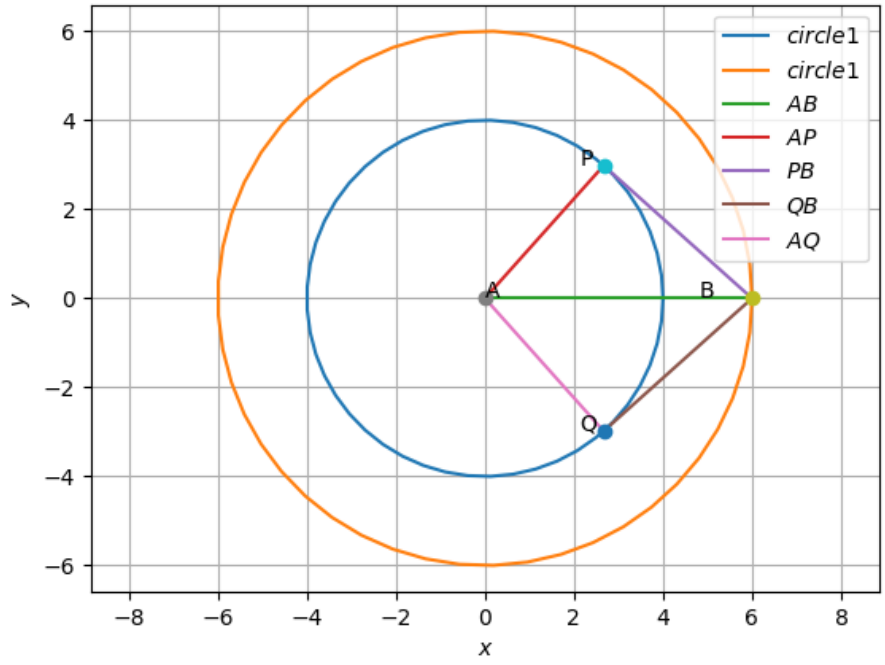
Circle construction

Construct a tangent to a circle of radius 4 units from a point on the concentric circle of radius 6 units.

- **Solution** :



PB and QB are the tangents


circle1
circle1
AB
AP
PB
QB
AQ
P
A
B
Q
6
4
2
0
−2
−4
−6
−8
−6
−4
−2
0
2
4
6
8
y
x