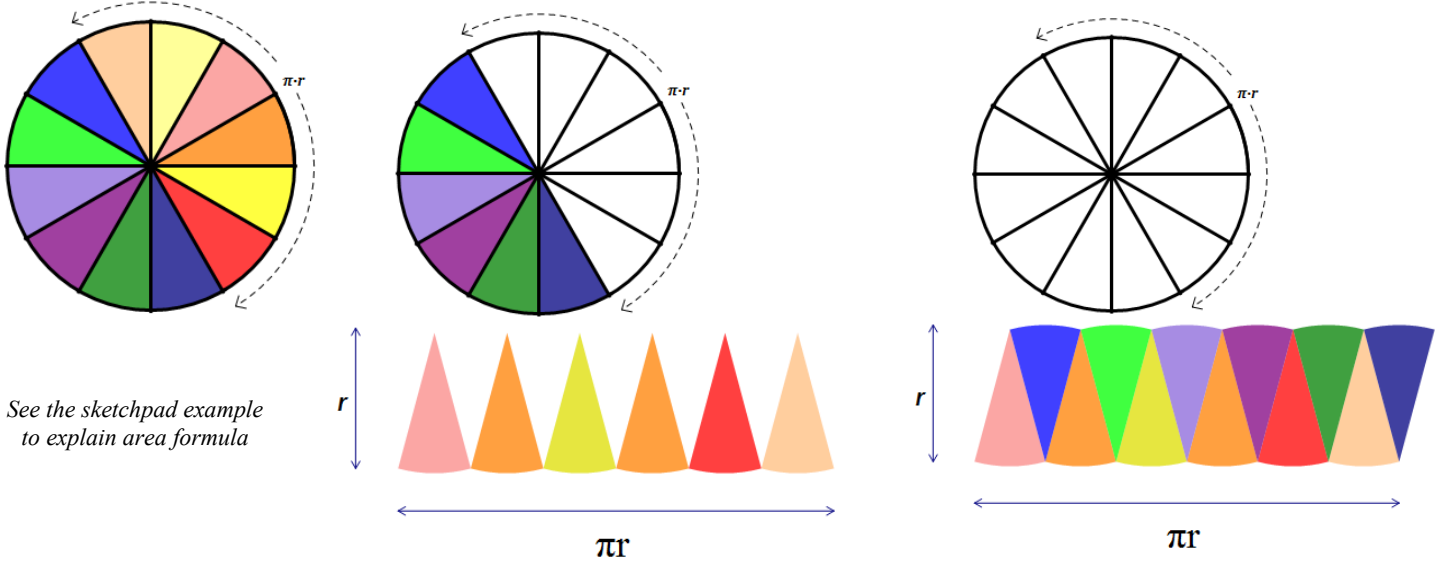
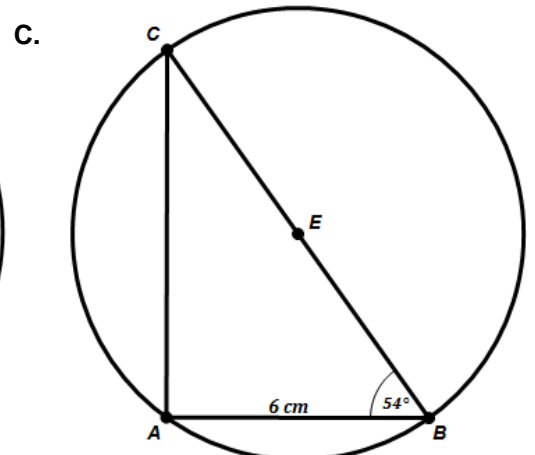
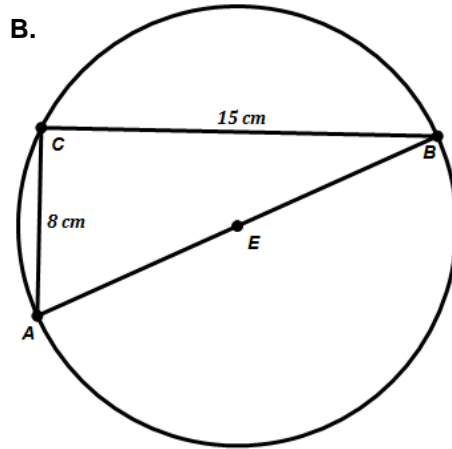
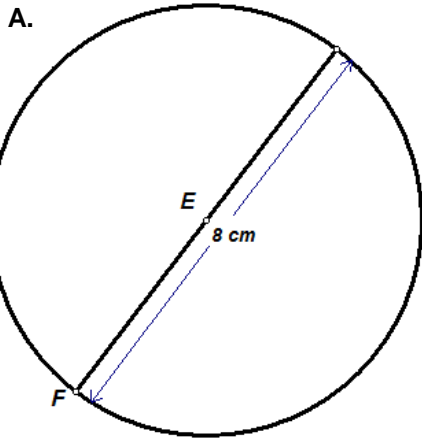


1. Consider cutting a circle into several pieces as shown below and then arrange them to form a parallelogram as shown below.



Conceivably, we could cut the circle into smaller pieces and continue putting them together in a similar manner & the shape would begin to approximate a rectangle with dimensions of πr by r . So, the area of any circle is $A = \pi \cdot r^2$

2. Find the Area of the following circles (assume point E is the center) :



(may need to use trigonometry)

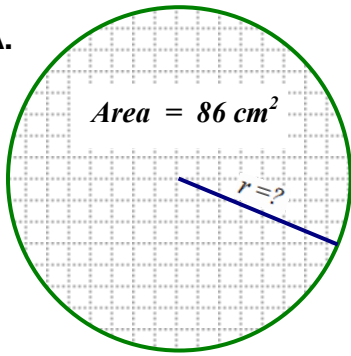
2a. Area =

2b. Area =

2c. Area =

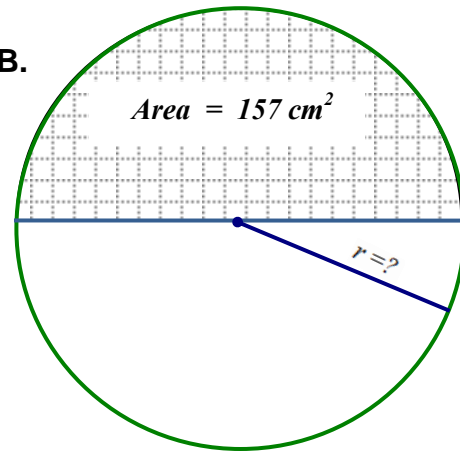
3. Find the Radius of each circle given the following information:

A.



3a. $r =$

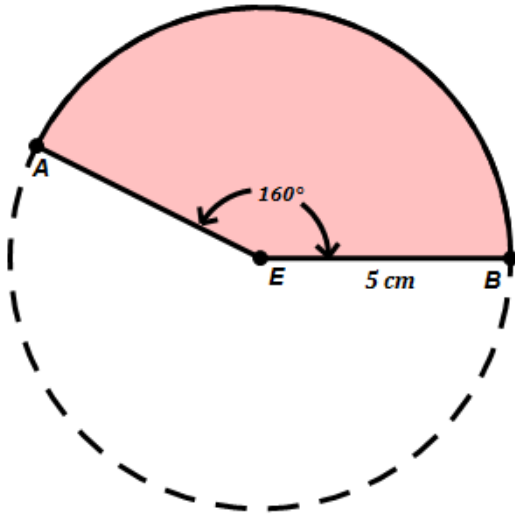
B.



3b. $r =$

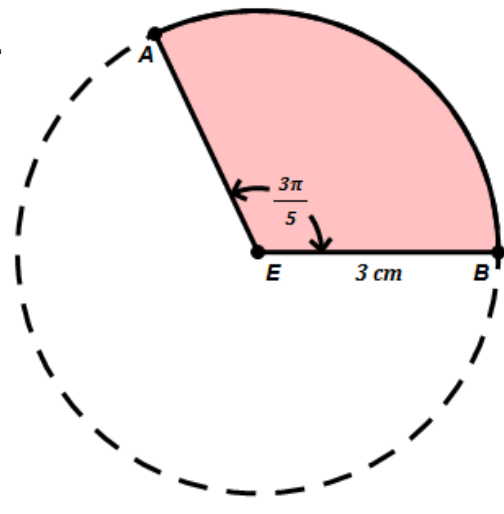
4. Find the sector area \widehat{AB} (assume point E is the center).

A.



4a.

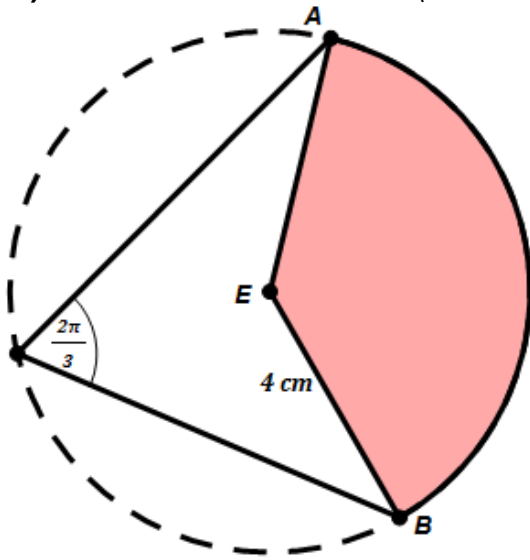
B.



4b.

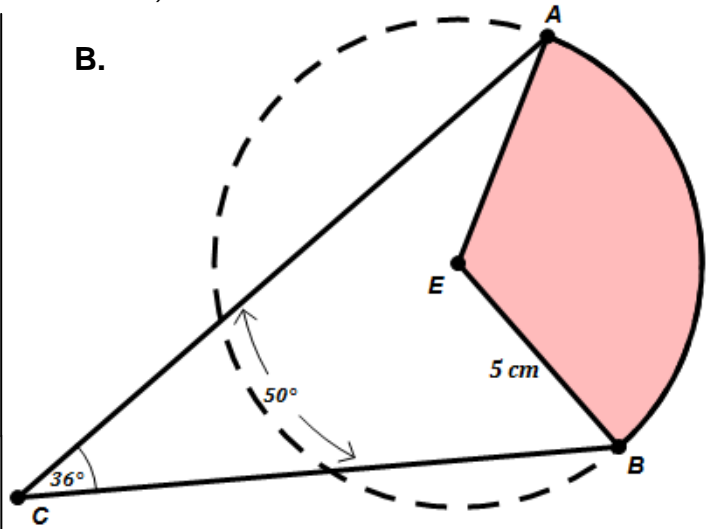
(5. Cont) Find the sector area \widehat{AB} (assume point E is the center).

C.



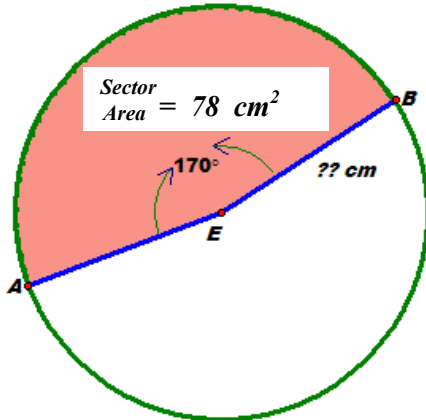
5c.

B.



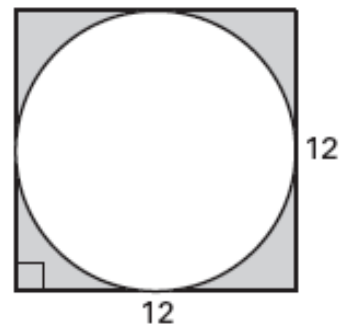
5d.

6. Find the length of the radius BE.



6. BE =

7. Find the area of the shaded region.



7. Area =