

Good morning: no warm up, check hw before the bell rings and have questions ready

1) 80°

2) 70°

3) 55°

4) 72°

5) 6

6) 10

7) 42

8) 26

9) 124°

10) 110°

11) 95°

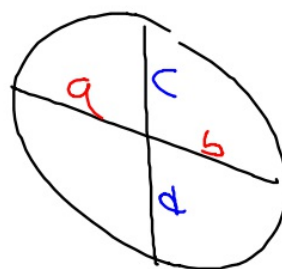
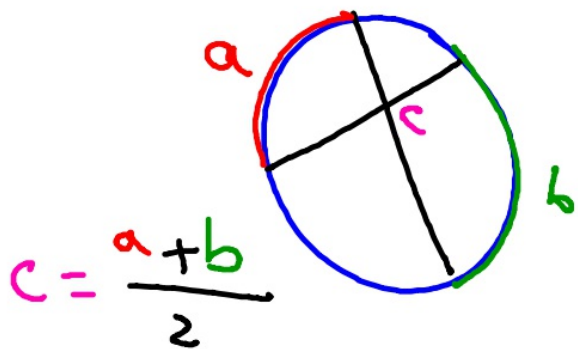
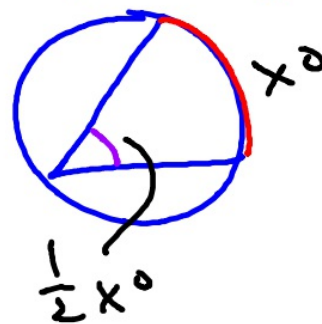
12) 200°

First Q3 test: Thursday

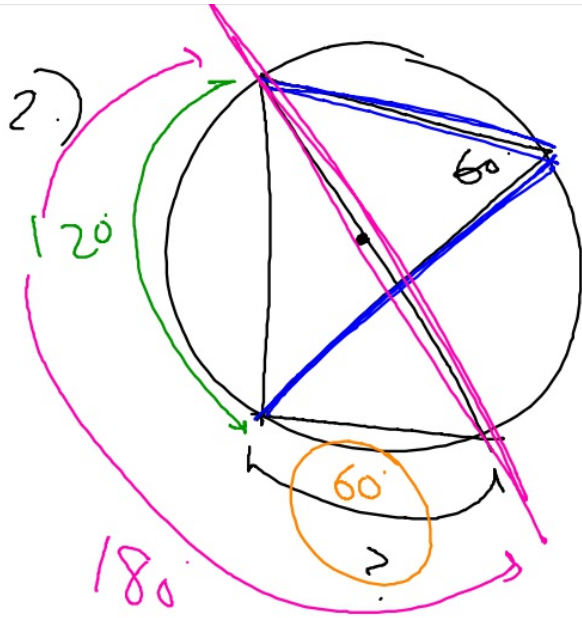
visibly random grouping

Summary of what we've learned so far:

- radians/degrees: $180^\circ = \pi \text{ rad}$
- equations of circles on coordinate plane $(x-h)^2 + (y-k)^2 = r^2$
- inscribed angle/intercepted arc
- chord angles/arcs
- chord lengths

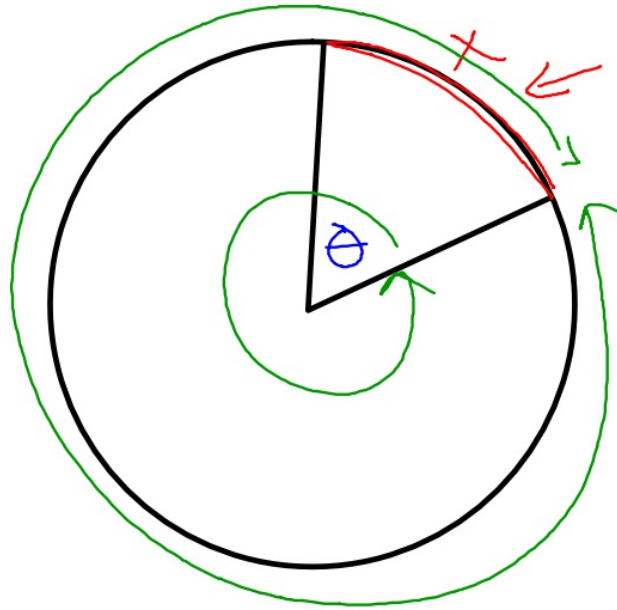


$$a \cdot b = c \cdot d$$



This is from the new handout
 note that one line passes through the center so it is a
 diameter, and thus creates a 180° arc!

Arc Length



length

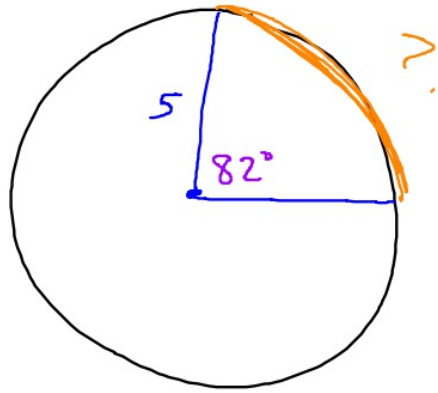
$$\frac{\theta}{360}$$

=

$$\frac{x}{2\pi r}$$

circumference

part
whole



full length ≈ 31.4

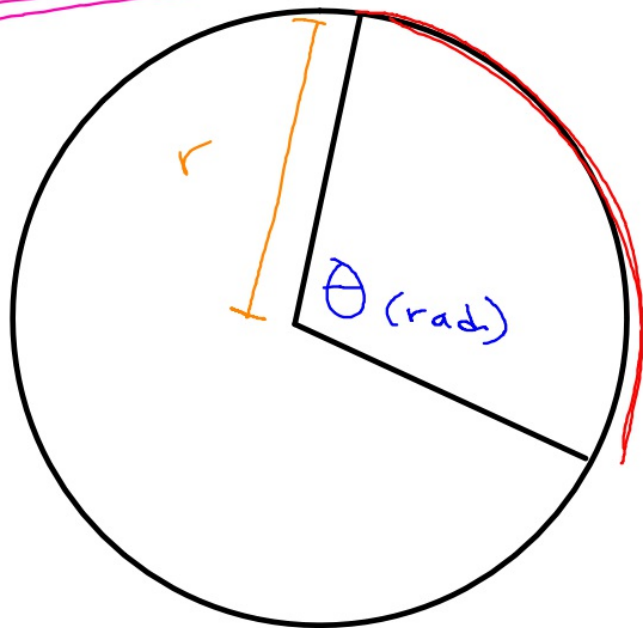
$$\frac{82^\circ}{360^\circ} = \frac{x}{2\pi(5)}$$

$$\frac{360x}{360} = \frac{820\pi}{360}$$

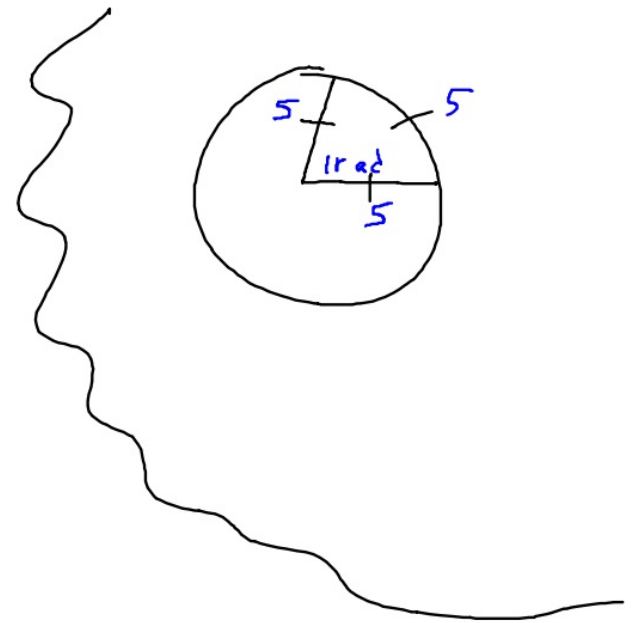
$$x = \frac{41}{18}\pi \approx 7.155$$

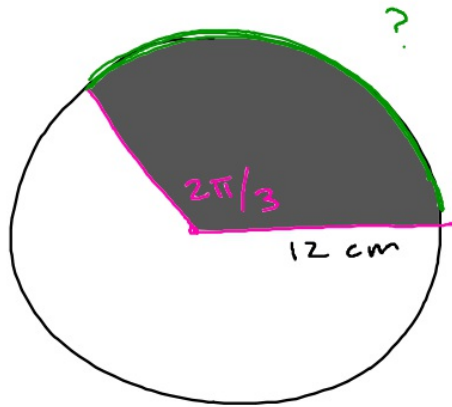
Arc Length in Radians

$$\text{Length} = r \cdot \theta$$



length





$$\text{Length} = r \cdot \theta$$
$$\text{length} = \frac{2\pi}{3} \cdot 12$$
$$8\pi \text{ cm}$$

shouldn't be shaded in, we are finding the arc length (the green curve)

Practice practice practice!!!!

homework for Thursday: #13-20 on old handout
all on new handout

Skip: old: 17-20

new: #13-16

answers + videos @ mgeo.weebly.com