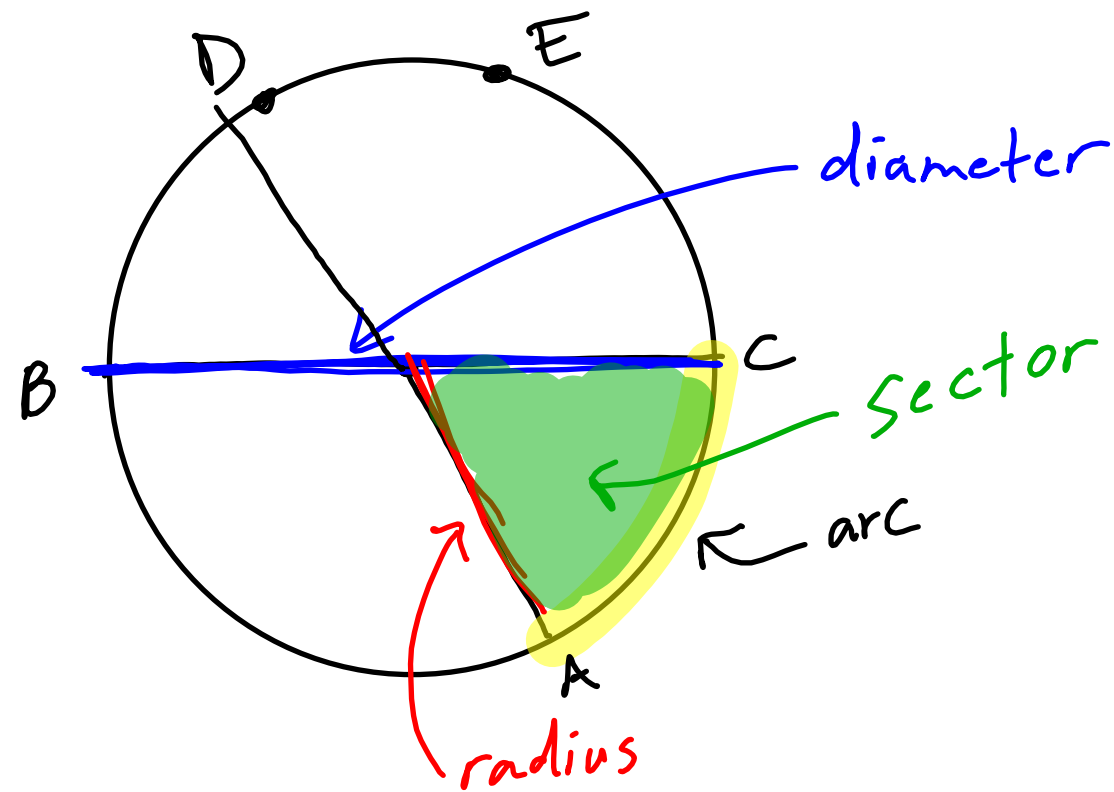


Arcs & Sectors of Circles

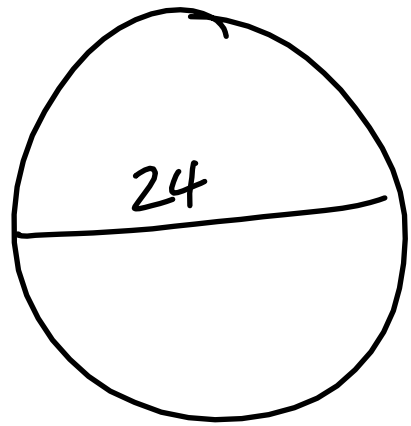


- major arcs \rightarrow greater than 180° (name w/ 3 pts.)
EX $\rightarrow \widehat{ABC}, \widehat{ABE}, \widehat{CDA}, \widehat{ABD}$
- minor arcs \rightarrow less than 180° (name w/ 2 pts.)
EX $\rightarrow \widehat{AC}, \widehat{BA}, \widehat{CE}, \widehat{CD}, \widehat{DB}, \widehat{DE}$
- semi-circles $\rightarrow = 180^\circ$ (name w/ 3 pts.)
EX $\rightarrow \widehat{CAB}$

- Circumference \rightarrow "perimeter" of circle

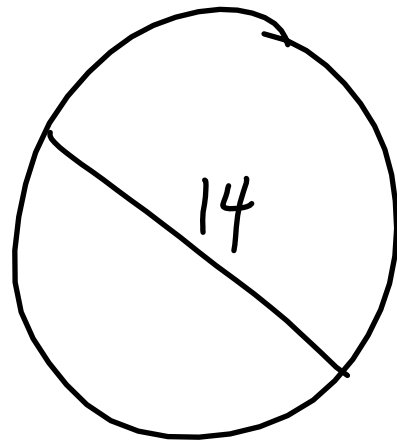
$\hookrightarrow C = \pi d$ OR $C = 2\pi r$

EX \rightarrow



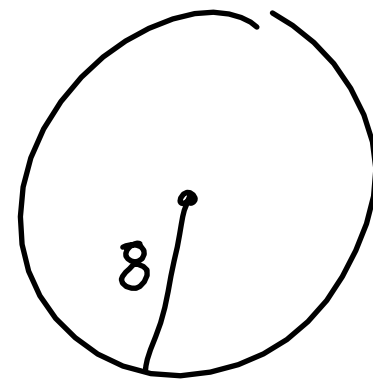
$C = 24\pi$

EX \rightarrow



$C = 14\pi$

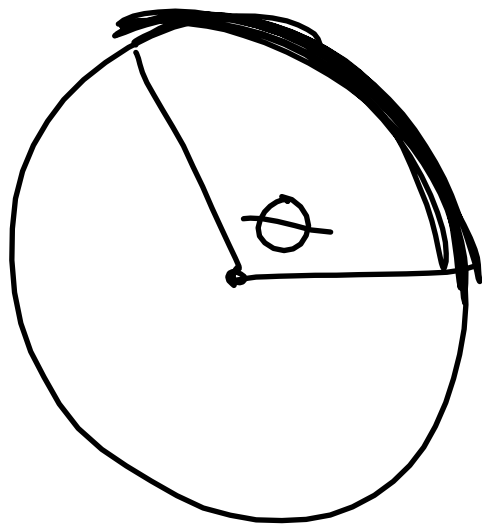
EX \rightarrow



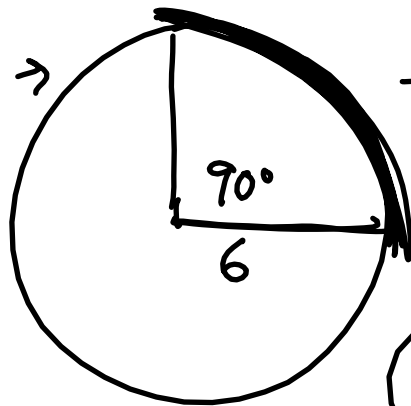
$C = 16\pi$

- Arc Length

$\frac{\text{angle}}{360} \cdot \pi d$



EX \rightarrow

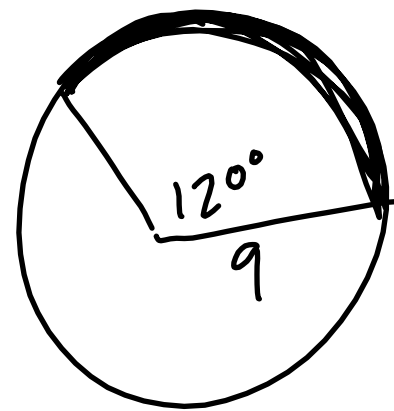


$\frac{90}{360} \cdot 12\pi$

$\frac{1}{4} \cdot 12\pi$

3π

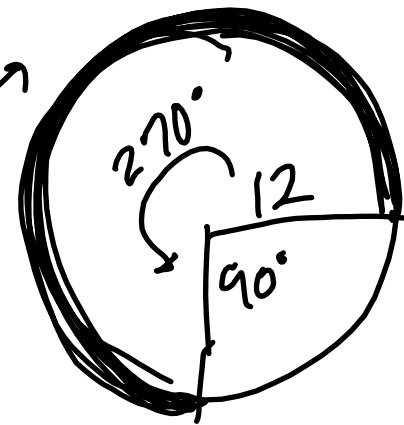
EX \rightarrow



$\frac{120}{360} \cdot 18\pi$

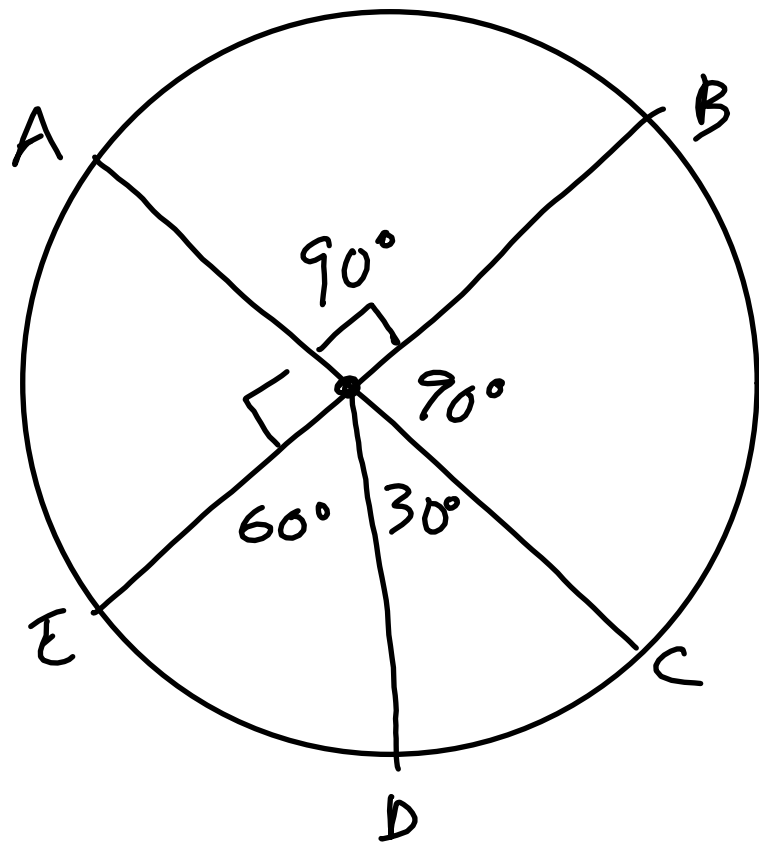
$\frac{1}{3} \cdot 18\pi = 6\pi$

EX \rightarrow



$\frac{270}{360} \cdot 24\pi$

$\frac{3}{4} \cdot 24\pi = 18\pi$



EX → Find the measure of the following arcs

1) $\widehat{AB} = 90^\circ$

2) $\widehat{CD} = 30^\circ$

3) $\widehat{ACD} = 210^\circ$

4) $\widehat{DE} = 60^\circ$

5) $\widehat{AD} = 150^\circ$

6) $\widehat{ABC} = 180^\circ$

HW: p. 654 \Rightarrow 10-48 even (omit 36)