QUIZ REVIEW WARMUP

1. State the center and length of the radius of each circle.

a. $(x+4)^2+(y-7)^2=81$ (-4, 7) $r=9$

b. $(x-8)^2+(y+3)^2=192$ (8, -3) $r=\sqrt{192}=8\sqrt{3}$

$192 = 16 \cdot 12$, $12 = 4 \cdot 3$

2. Find an equation of a circle that has the given center and radius. Center (- 6, 5); r = $2\sqrt{7}$

$(2\sqrt{7})^2 = 4 \cdot 7$

$(x+6)^2+(y-5)^2=28$

3. Write the standard form equation for the following circle.

$x^2+y^2+14x-8y-10=0$

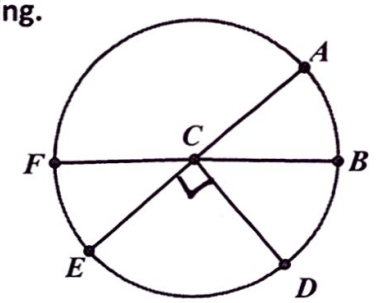
$(x^2+14x+\underline{49})+(y^2-8y+\underline{16})=10+\underline{49}+\underline{16}$

$\left(\frac{14}{2}\right)^2$ $\left(\frac{-8}{2}\right)^2$

$(x+7)^2+(y-4)^2=75$

Honors Math 3: Modeling with Trigonometric Functions **Arcs and Angles Practice** MCG Key

1. In circle C, $\overline{EA}$ and $\overline{FB}$ are diameters. $\overline{EA} \perp \overline{CD}$. Identify the following.



a) Two major arcs $\overset{\frown}{DFA}$, $\overset{\frown}{BDA}$

b) Two minor arcs $\overset{\frown}{FE}$, $\overset{\frown}{BD}$

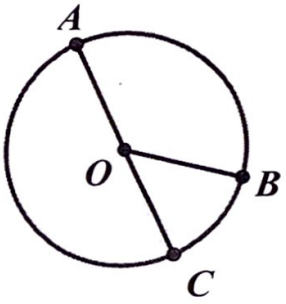
c) Two semicircles $\overset{\frown}{FDB}$, $\overset{\frown}{BAF}$

d) A pair of adjacent angles $\angle FCE$, $\angle ECD$

e) An acute central angle $\angle ACB$

f) An obtuse central angle $\angle BCE$

2. Identify the following in Circle *O*.



a) $\overline{AC}$ diameter

b) $\overset{\frown}{AB}$ minor arc

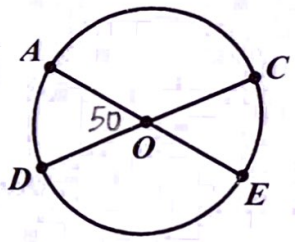
c) $\overset{\frown}{ABC}$ semi ⊙

d) $\overset{\frown}{ACB}$ major arc

e) $\overline{OB}$ radius

f) $\angle BOC$ central ∠

Answer the following using the information in Circle *O*. * $m\angle ADD = 50$



50 50 130

a) Find the measure of $\overset{\frown}{AD}$, $\overset{\frown}{CE}$, $\overset{\frown}{AC}$ _____

b) Identify the semicircles DAC, DEC, ACE, ADE

c) What is the measure of a semicircle? 180

d) Find the measure of $\overset{\frown}{ACD}$, $\overset{\frown}{DAE}$ 310, 230