

Now That's A Big Circle!

1. In Circle O, $m\widehat{AE} = 80^\circ$, $m\widehat{DE} = 20^\circ$, and $m\widehat{BC} = 70^\circ$.
Find the measures of the following:

a) $m\widehat{AB} = 100$

b) $m\widehat{DC} = 90$

c) $m\angle DOE = 20$

d) $m\angle ABE = \frac{1}{2}(80) = 40^\circ$

e) $m\angle AFB$

$\frac{1}{2}(100 + 110) = 105$

f) $m\angle AFE$

75°

g) $m\angle BAC$

$\frac{1}{2}(70) = 35^\circ$

h) $m\angle AEB$

$\frac{1}{2}(100) = 50$

i) $m\angle CDG$

$\frac{1}{2}(90) = 45^\circ$

j) $m\angle ODH$

90°

k) $m\angle BAE$

$\frac{1}{2}(180) = 90$

l) $m\angle CPA$

$\frac{1}{2}(100 - 70) = 15^\circ$

m) $m\angle ACD$

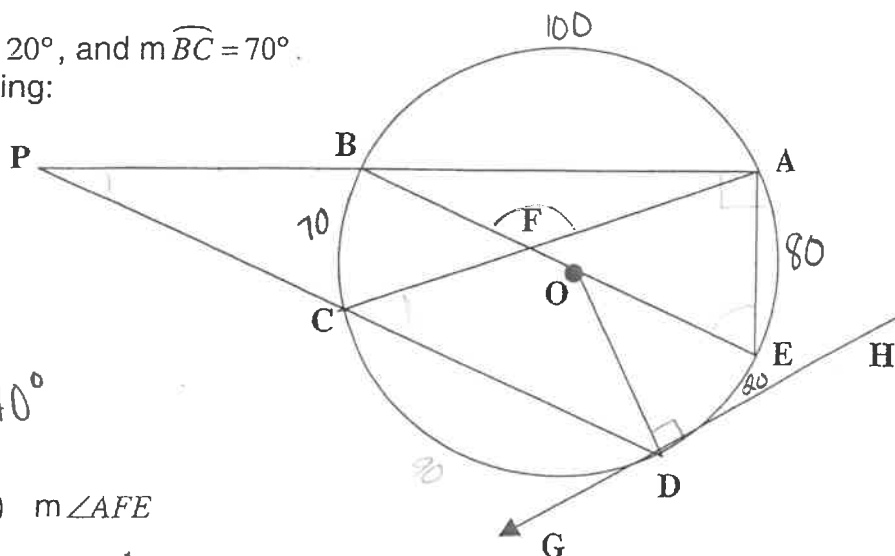
$\frac{1}{2}(100) = 50$

n) $m\angle CAE$

$\frac{1}{2}(110) = 55$

o) $m\angle ODC$

$180 - 90 - 45 = 45^\circ$



2. Given: Circle O with $m\angle BEF = 60^\circ$,
 $m\widehat{BE} = 110^\circ$, $m\widehat{GE} = 60^\circ$, $\angle BCG = 50^\circ$. Find:

a) $m\widehat{BDF} = 120^\circ$

b) $m\widehat{FG} = 70$

c) $m\widehat{BD}$

$50 = \frac{1}{2}(170 - x)$

$100 = 170 - x$

$x = 70^\circ$

d) $m\angle DGF$

$\frac{1}{2}(50) = 25^\circ$

e) $m\angle CHE$

$\frac{1}{2}(180 + 70) = 125^\circ$

f) $m\angle ABE$

$\frac{1}{2}(110) = 55^\circ$

