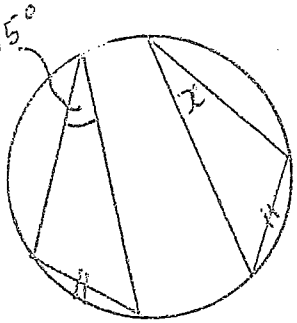
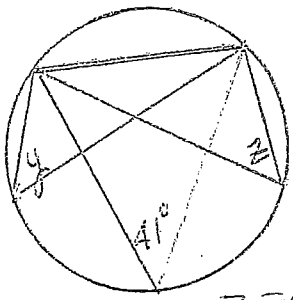
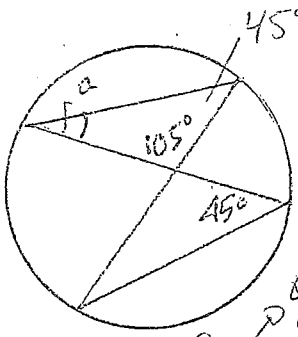
Ma 9 Inscribed Angles Name:

1) 

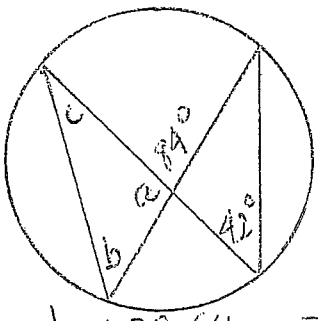
$x = 35°$
($\angle$'s opposite equal chords are =)

2) 

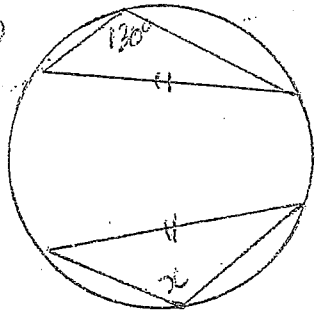
$y = 41°$, $z = 41°$
($\angle$'s opposite equal chords are =)

3) 

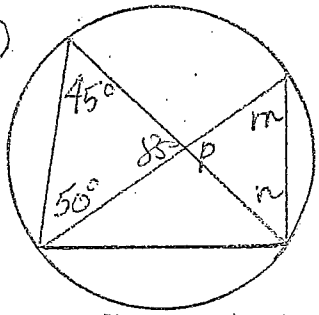
$\angle a = 30°$ ← $\angle$'s in a $\triangle$ add to 180°
($180° - 105° - 45° = 30°$)

4) 

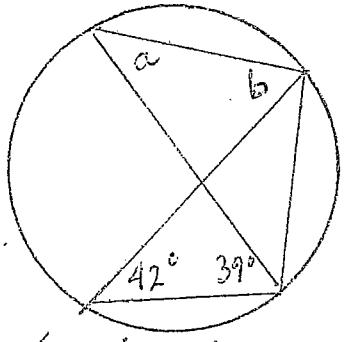
$b = 42°$ ($\angle$'s opp = ~~chord~~ arcs)
$a = 96°$ ($\angle$'s on a line)
$c = 42°$ ($\angle$'s in a $\triangle$ add to 180°)

5) 

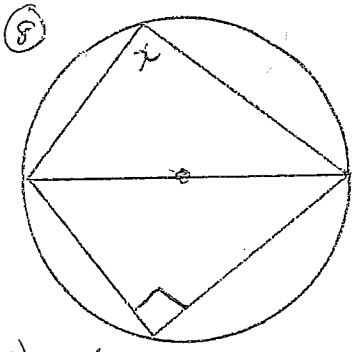
~~x~~ $\angle x = 130°$ ($\angle$'s opp = chords)

6) 

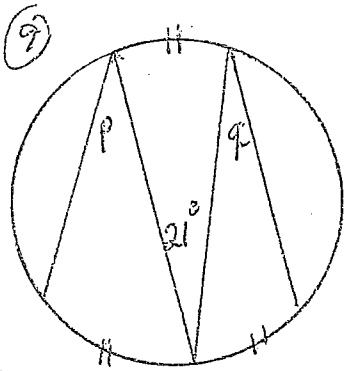
$p = 85°$ (vertically opp $\angle$'s are =)
$n = 50°$ ($\angle$'s opp = arcs are =)
$m = 45°$ ($\angle$'s opp = chords are =)

7) 

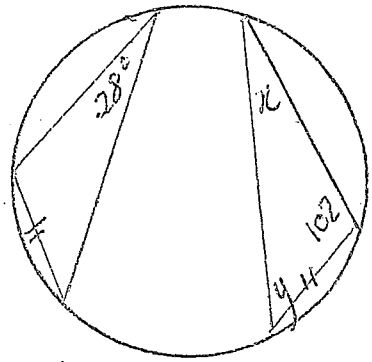
$\angle a = 42°$ ($\angle$'s opp = chords are =)
$\angle b = 39°$ ($\angle$'s opp = arcs are =)

8) 

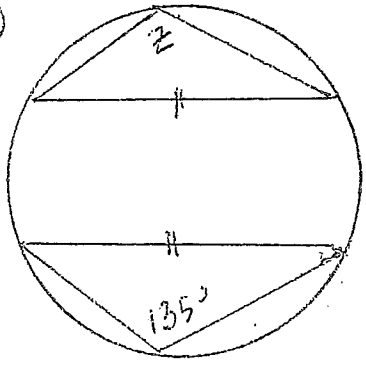
$\angle x = 90°$ ($\angle$'s opp = chords are =)

9) 

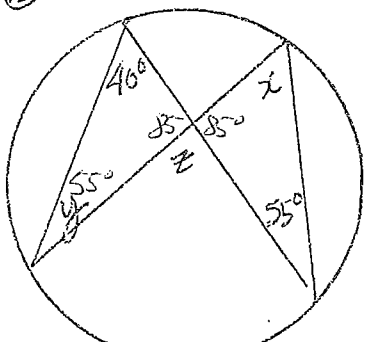
$\angle p = \angle q = 21°$
bc $\angle$'s opp = arcs are =

10) 

$\angle x = 28°$ ($\angle$'s opp = arcs are =)
$\angle y = 50°$ ($\angle$'s in a $\triangle$ add to 180°)

11) 

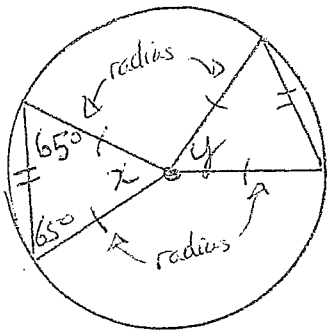
$\angle z = 135°$
($\angle$'s opp = chords are =)

12) 

$\angle x = 40°$ ($\angle$'s opp = arcs are =)
$\angle y = 55°$ ($\angle$'s opp = arcs are =)
$\angle z = 95°$ ($\angle$'s around apt add to 360
bc $(360 - 85 - 85) = 95°$

Pm 9 Central Angles Name:

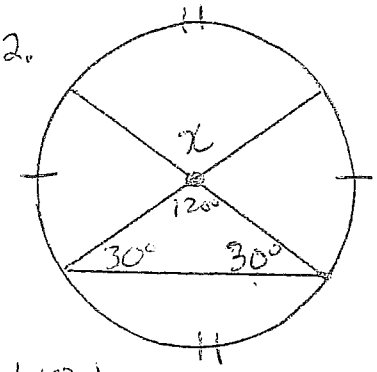
1.



$\angle x = 50°$ ($\angle$'s in a $\triangle$ add to 180°)

$\angle y = 50°$ (central $\angle$s on = chords are =)

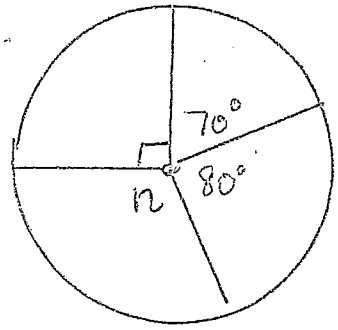
2.



$\angle x = 120°$

↳ central $\angle$s opp = arcs are =

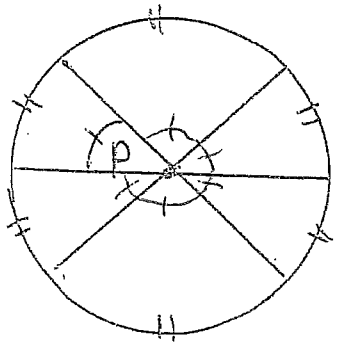
3.



$n = 120°$

↳ $\angle$'s around a pt add to 360°

4.

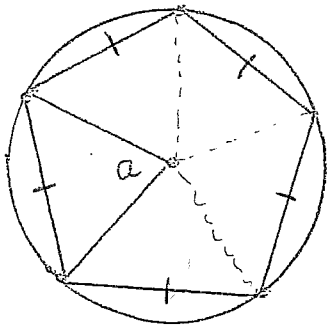


each central angle is = because equal arcs (each same as 'p')

$\therefore \frac{6p}{6} = \frac{360°}{6}$

$p = 60°$

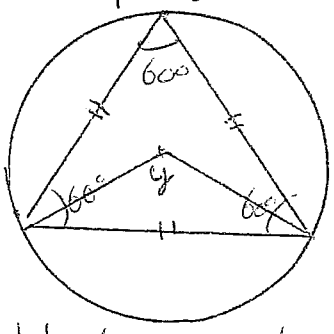
5.



$\angle a = 72°$

→ 5 equal chords, thus $\frac{360°}{5} = 72°$

6.



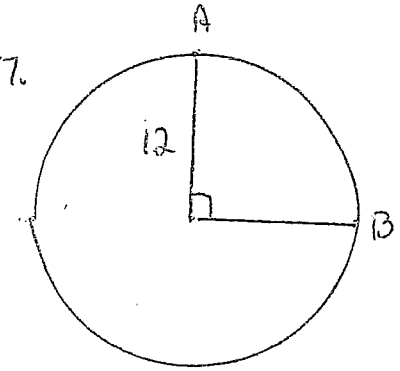
Equilateral $\triangle$, $\therefore$ each angle of outside $\triangle$ is 60°

↳ $y = 120°$

↳ central $\angle$ on equal/same chord is twice the size of inscribed $\angle$

★ need next lesson for this question ★

7.



Find the length of arc $\overset{\frown}{AB}$

* think about finding "part" of the circumference

$\overset{\frown}{AB}$ is 1/4 of the circumference

$C = 2\pi r$

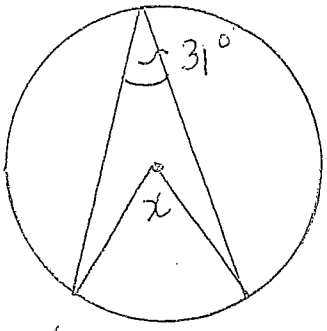
$= 2\pi(12)$

$= 75.4$

$\therefore \overset{\frown}{AB}$ is 1/4 of 75.4 or 18.85

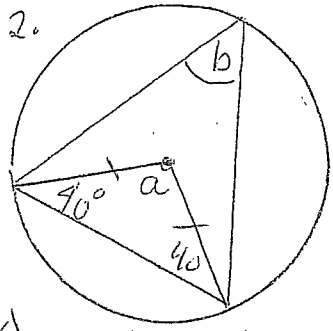
Prn 9 Central / Inscribed Angles Name

1.



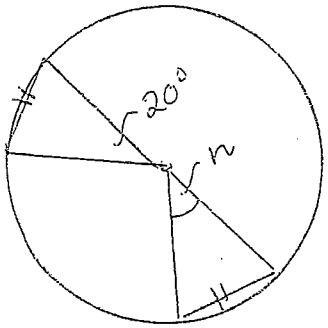
$\angle x = 62°$ (double inscribed $\angle$)

2.



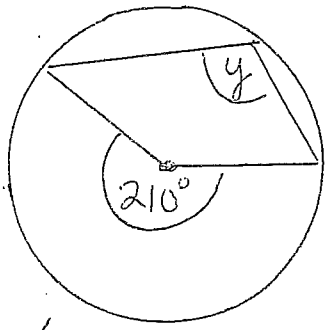
$\angle a = 100°$ ($\angle$'s in a $\triangle$)
$\angle b = 50°$ (½ central $\angle$)

3.



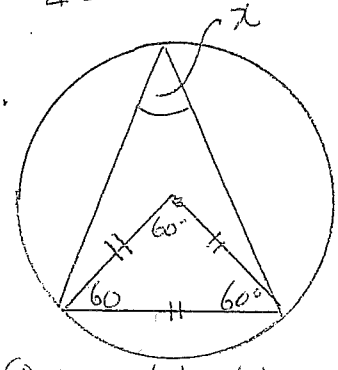
$\angle n = 20°$ (central $\angle$'s on = chord

4.



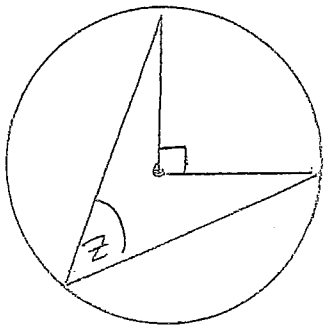
$\angle y = 105°$ (½ central $\angle$)

5.



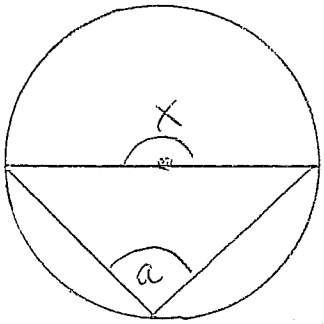
① $\triangle$ equilateral $\triangle$
② $\angle x = 30°$ (½ central $\angle$)

6.



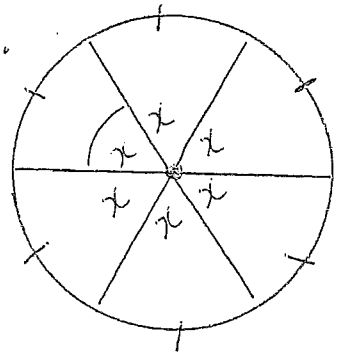
$\angle z = 45°$ (½ central $\angle$)

7.



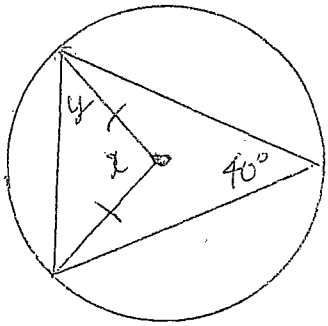
$\angle x = 180°$ (straight line)
$\angle a = 90°$ (½ central $\angle$)

8.



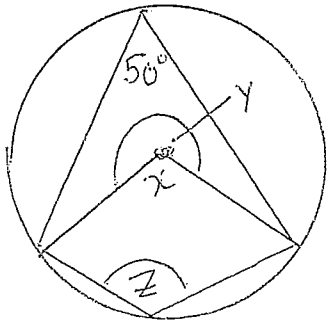
$\angle x = 60°$
($6x = 360$)
6 $\angle$'s with = arcs)

9.



$\angle x = 80°$ (double inscrib $\angle$)
$\angle y = 50°$ (isosceles $\triangle$

10.



$\angle x = 100°$ (double inscribed $\angle$)
$\angle y = 260°$ ($\angle$'s around a pt add to 360°)
$\angle z = 130°$ (½ central $\angle$)