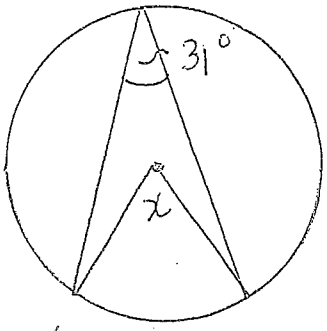
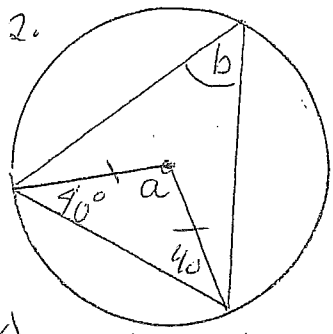
Prn 9 Central / Inscribed Angles Name

1.



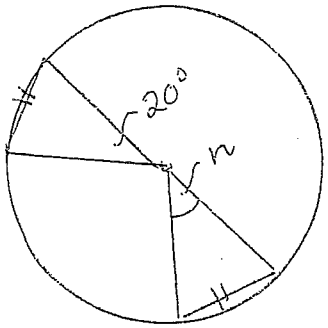
$\angle x = 62°$ (double inscribed $\angle$)

2.



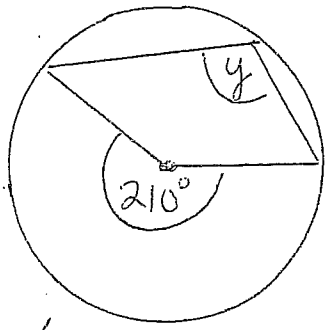
$\angle a = 100°$ ($\angle$'s in a $\triangle$)
$\angle b = 50°$ ($\frac{1}{2}$ central $\angle$)

3.



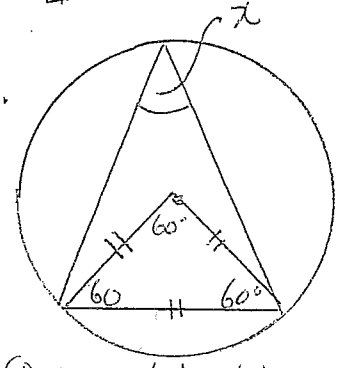
$\angle n = 20°$ (central $\angle$'s on = chord

4.



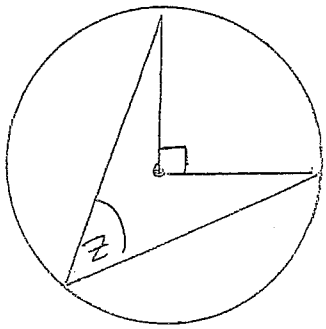
$\angle y = 105°$ ($\frac{1}{2}$ central $\angle$)

5.



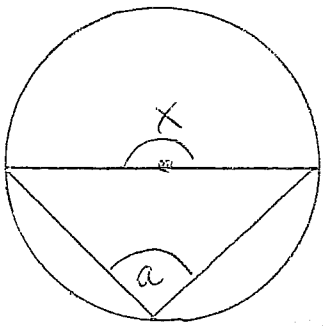
① $\triangle$ equilateral $\triangle$
② $\angle x = 30°$ ($\frac{1}{2}$ central $\angle$)

6.



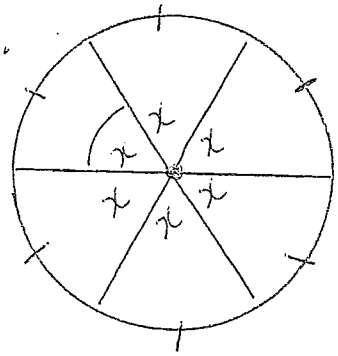
$\angle z = 45°$ ($\frac{1}{2}$ central $\angle$)

7.



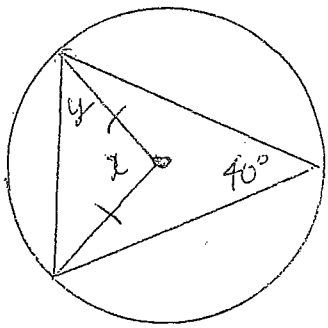
$\angle x = 180°$ (straight line)
$\angle a = 90°$ ($\frac{1}{2}$ central $\angle$)

8.



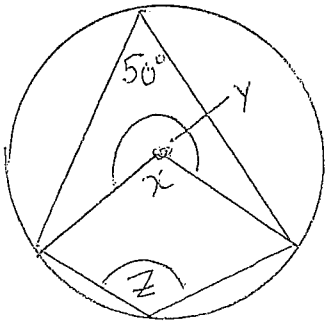
$\angle x = 60°$
($6x = 360$)
6 $\angle$'s with = arcs)

9.



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

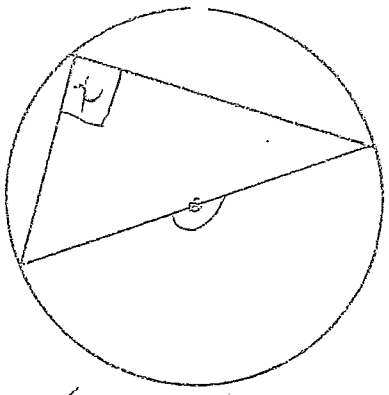
10.



$\angle x = 100°$ (double inscribed $\angle$)
$\angle y = 260°$ ($\angle$'s around a pt add to 360°)
$\angle z = 130°$ ($\frac{1}{2}$ central $\angle$)

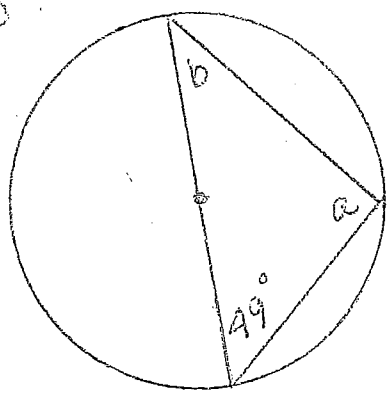
Semi-circle Property

(1)



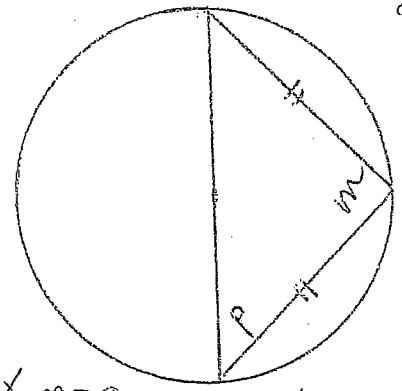
$\angle x = 90°$ (semicircle property)
or
(½ central $\angle$ → 180° due to straight line)

(2)



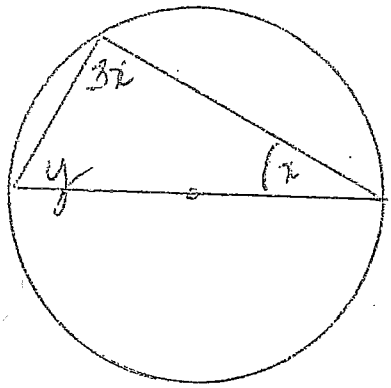
$\angle a = 90°$
(semicircle property or ½ central $\angle$)
$\angle b = 41°$
($\angle$s in a $\triangle$)

(3)



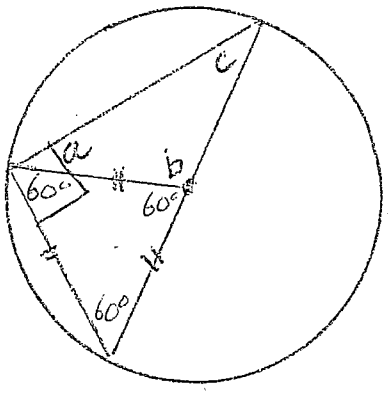
$\angle m = 90°$ (semicircle property)
$\angle p = 45°$ (isosceles $\triangle$ → $\angle$s opp = sides are =)

(4)



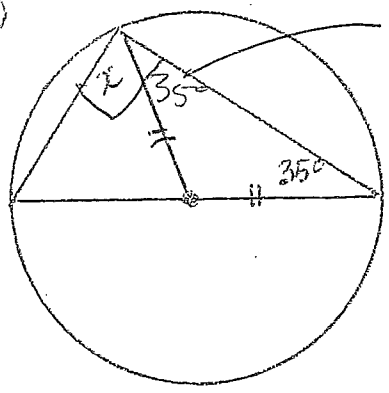
$3x = 90°$ (semicircle property)
$\therefore x = \frac{90}{3} = 30°$
$\angle y = 60°$
($\angle$s in a $\triangle$)

(5)



$\angle a = 30°$ → equilateral $\triangle$ ∴ 60°
→ $\angle a$ / 60° add to 90° (semicircle property)
↳ 90° − 60° = 30°
$\angle b = 120°$ ($\angle$s on a line)
$\angle c = 30°$ ($\angle$s in a $\triangle$ or $\angle$s opp = sides)

(6)



isosceles $\triangle$ ∴ $\angle$s opp. = sides are =
$\angle x = 90° - 35°$
$= 55°$
↳ total $\angle = 90°$ due to semi circle property