

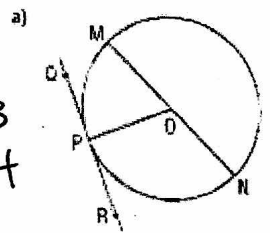
Circle Geometry

June exam review

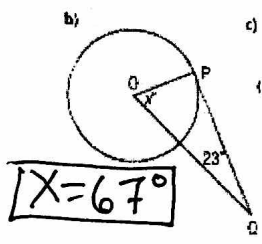
Solutions

3. In each diagram, point O is the centre of each circle. Which lines are tangents?

OR is Tangent

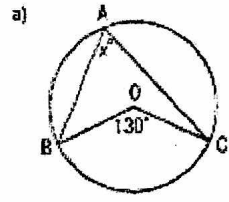


5. Point P is a point of tangency and O is the centre of each circle. Determine each value of x° .



$x = 67^\circ$

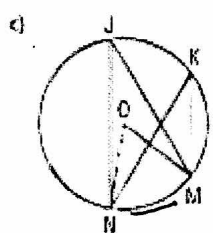
4. Point O is the centre of each circle. Determine each value of x° .



$x = 65^\circ$

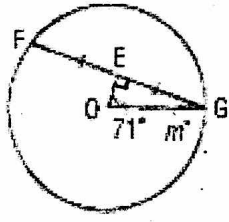
O is the center of the circle. Identify all the inscribed angles subtended by the minor arc NM.

Inscribed angles:
 $\angle NJM$
 $\angle NKM$



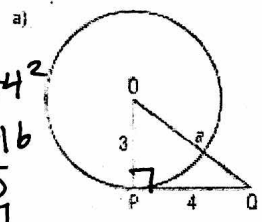
$180 - 90 - 71$
 $m = 19^\circ$

4. Point O is the centre of the circle. Determine the value of m° .



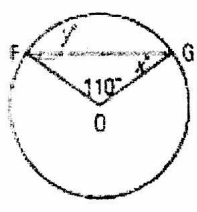
6. Point P is a point of tangency and O is the centre of each circle. Determine each value of a .

$a^2 = 3^2 + 4^2$
 $a^2 = 9 + 16$
 $a^2 = 25$
 $a = 5$

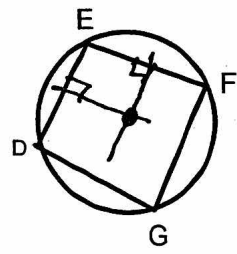


4. Point O is the centre of each circle. Determine each value of x° and y° .

Isosceles $\Delta!$
 180
 710
 $70 \div 2$
 $x = y = 35^\circ$

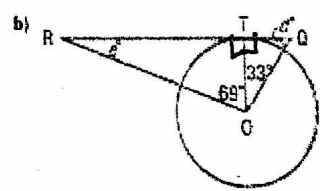


How could you find the center of this circle?



bisect any 2 chords! Where they cross is the center of the circle.

7. Point T is a point of tangency and O is the centre of each circle. Determine each value of d° and e° .

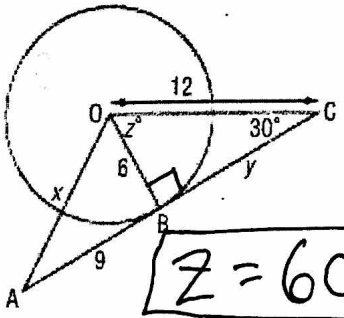


$d = 57^\circ$

$e = 21^\circ$

14. Point O is the centre of the circle. Point B is a point of tangency. Determine the values of x , y , and z° . Give the answers to the nearest tenth where necessary. Justify the strategies you used.

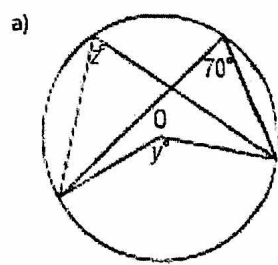
$c^2 = 9^2 + 6^2$
 $c^2 = 81 + 36$
 $c^2 = 117$
 $c = \sqrt{117}$
 $c = 10.8$



$z = 60^\circ$

$y^2 = 12^2 - 6^2$
 $y^2 = 144 - 36$
 $y^2 = 108$
 $y = 10.41$

5. Point O is the centre of each circle. Label each vertex. Determine each value of y° and z° . Which circle properties did you use?



$z = 70^\circ$
 $y = 140^\circ$

