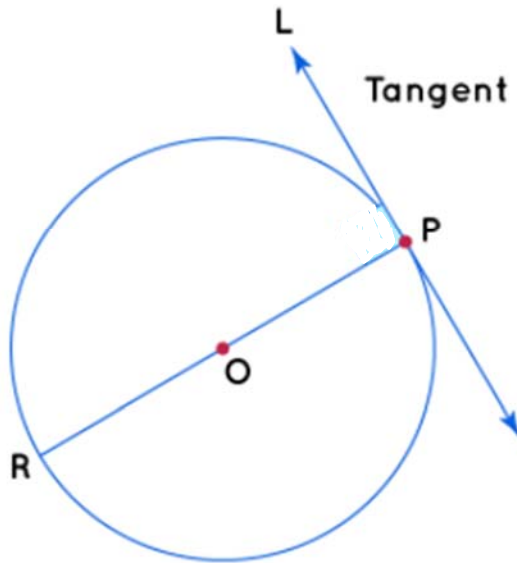


Name: \_\_\_\_\_  
PCH: More with Circles

Date: \_\_\_\_\_  
Ms. Loughran

## Tangent to a circle



1. Write an equation of the line tangent to the circle  $x^2 + y^2 = 25$  at the point in the fourth quadrant where  $x = 3$ .

2. Write an equation of the line tangent to the circle  $x^2 + 14x + y^2 + 18y = 39$  at the point in the second quadrant where  $x = -2$  .

3. Write an equation of a line tangent to the circle  $x^2 + y^2 - 10x - 14y = 95$  at a point where  $x = 10$  .

4. Find the equation of the line that has a positive slope and is tangent to the circle  $(x-1)^2 + (y-1)^2 = 4$  at one of its y-intercepts.

5. Write the equation of a circle that passes through  $(2, 8)$ ,  $(5, 7)$  and  $(6, 6)$ .

6. Write the equation of a circle that passes through  $(-3, -3)$ ,  $(-1, 11)$ , and  $(5, 13)$ .