

63.

-eq:

$$\lim_{x \rightarrow 0} 15x \cot(x) =$$

-eq:

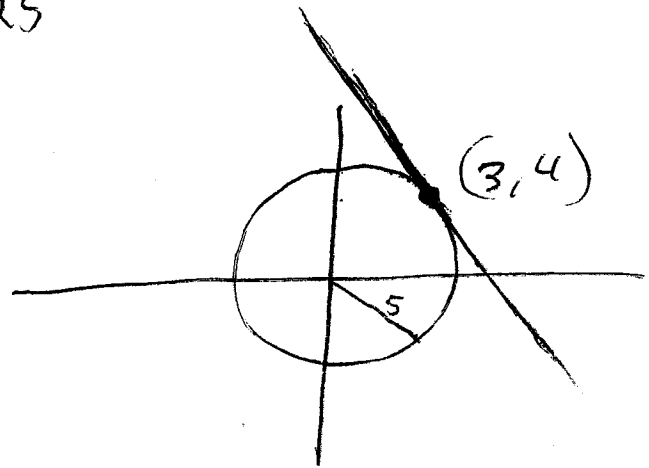
$$f(x) = \sin(\cos^2(x))$$

$$f'(x) =$$

• Implicit differentiation,

eg.: Find the equation of the tangent line to the circle

at $x^2 + y^2 = 25$
 $(3, 4)$.



Exer 1 Find y' if $x^3 + y^3 = 6xy$

(2) Find the eq. for the tangent line to the above curve at $(3, 3)$

(3) At which points is the tangent line horizontal?

ex. Find y' if

$$\sin(x+y) = y^2 \cos(x)$$