§2.7: IMPLICIT DIFFERENTIATION

Dr. Mike Janssen
March 1, 2021
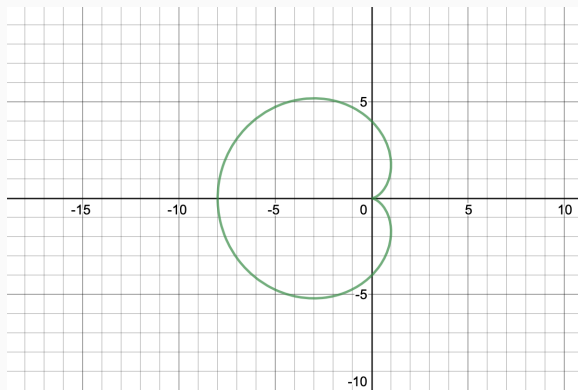
ANNOUNCEMENTS

-

PREVIEW ACTIVITY DISCUSSION

MOTIVATING EXAMPLE

Consider the cardioid:

$$(x^2 + y^2)^2 + 8x(x^2 + y^2) = 16y$$

ACTIVITY 2.7.2

HORIZONTAL AND VERTICAL TANGENTS

If

$$\frac{dy}{dx} = \frac{q(x,y)}{p(x,y)},$$

The horizontal tangent is when:

The vertical tangent is when:

ACTIVITIES 2.7.3-2.7.4