

2.7 – Implicit Differentiation, Part II

1. Consider the curve W , defined by $x^2 + xy - y^2 = 5$.

a. If possible, find the point(s) on W with slope 2.

b. If possible, find the point(s) on W with slope 1.

2. Consider the curve C , given by $x^2 + y^2 = 2y - 6x - 6$.

a. Find the coordinates for any horizontal tangent lines for C .

b. Find the coordinates for any vertical tangent lines for C .

3. Consider the curve Γ , defined by $x^3 + y^3 = 6xy$.

a. Find the coordinates for any horizontal tangent lines for Γ .

b. Find the coordinates for any vertical tangent lines for Γ .