Quiz #5; Tuesday, date: 02/20/2018
MATH 53 Multivariable Calculus with Stankova
Section #114; time: 2 – 3:30 pm
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Student name:

1. At what point does the curve have maximum curvature? What happens to the curvature as $x \to \pi/2$?

$$y = \ln(\sec x), \qquad 0 \leq x < \frac{\pi}{2}.$$

2. *True / False?* If a curve is parametrized by its arc length, there is no tangential component of acceleration and the normal component of acceleration is the curvature.

3. *True / False?* The level surfaces of $f(x, y, z) = x^2 + y^2 - z$ are elliptic paraboloids, that can be obtained from each other by shifting in the z-direction.