Math 375, Spring 2026, Quiz 17, 3/27/26 **Name:**

Suppose that $\tan(\theta) = -\frac{7}{3}$ and θ is in Quadrant 2.

a) Use a ***Pythagorean identity*** to find a different trig function of θ.

b) Use ***Reciprocal identities***, and the given information, and your result of part (a) to find two more trig functions of θ.

c) Find the final two trig functions of θ.

d) Be sure to use proper notation in your answers.

Ans:

a) $\sec(\theta) = -\frac{\sqrt{58}}{3}$

b) $\cos(\theta) = -\frac{3}{\sqrt{58}}$

$\cot(\theta) = -\frac{3}{7}$

c) $\sin(\theta) = \frac{7}{\sqrt{58}}$

$\csc(\theta) = \frac{\sqrt{58}}{7}$