Math 101, Calculus I, Fall 2023, Sec. 1, HTK

Quiz 2, Tue., Oct. 17

Do NOT use l'Hôpital rule.

1. Find the equations of the tangent lines drawn to the curve $y = x^2$ from the point $(1, -3)$.

Find the equations of the tangent lines drawn to the curve $y = -x^2$ from the point $(-1, 3)$.

2. Find $\dfrac{dy}{dx}$ for the curve $\tan(xy^2) = \dfrac{2xy}{\pi}$.

Find $\dfrac{dy}{dx}$ for the curve $\cos\left(\dfrac{\pi y}{x}\right) = \dfrac{x^2}{y} - \dfrac{17}{2}$.