Name: _____

Quiz 11

MATH 200
February 24, 2022

1. Differentiate: $\sec(x)\ln(x)$

2. Differentiate: $\sec\big(\ln(x)\big)$

3. Differentiate: $\ln\big(\sec(x)\big)$

4. Differentiate: $4x + \dfrac{xe^x}{\ln(x)}$

5. Find all x for which the tangent line to $f(x) = \ln\left|x^3 - 6x^2 - 15x\right|$ at $\big(x, f(x)\big)$ has slope 0.

Name: _____

Quiz 11

MATH 200
February 24, 2022

1. Differentiate: $\tan\big(\ln(x)\big)$

2. Differentiate: $\ln(x)\tan(x)$

3. Differentiate: $\ln\big(\tan(x)\big)$

4. Differentiate: $4 + \dfrac{x\ln(x)}{e^x}$

5. Find all x for which the tangent line to $f(x) = \ln\left|x^3 - 9x^2 + 24x\right|$ at $\big(x, f(x)\big)$ has slope 0.