## Problem of the Week \#3

(Spring 2017)

Let $f(x)=\sqrt{x^{2}+1}$. Prove: If $b \leq-|a|$, then no tangent line to $f$ passes through $(a, b)$.
[Please fully explain your answer.]
Solutions should be submitted to Cinda Furry, in Gardner Hall 435, by 4:00 P.M. on Wednesday, February 15, 2017.

Every week, the best solution submitted earns a $\$ 10$ Platteville gift certificate; the top scorer each semester also wins a cash award. Good luck! You can always see the Problem of the Week (and complete rules) online at:

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http://uwpmath.weebly.com/
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