# MATH 135: Quiz 10 

November 11, 2014

Name: $\qquad$ Sec: $\qquad$

1. Compute the following limits.
(a)

$$
\lim _{x \rightarrow 3} \frac{x^{3}-27}{x^{2}+x-6}
$$

(b)

$$
\lim _{x \rightarrow \pi} \frac{\sin x}{\pi^{2}-x^{2}}
$$

2. A farmer has 170 feet of fencing with which to enclose a pen for his sheep. He wants to build the pen adjacent to a 30 ft long barn, and will not need to put fencing against the barn. What is the area of the largest pen he can build?

