

Math 103, Fall 2014  
Week 11

Check Homework Problems

1. You should apply L'Hospital's rule four times, and end up with 0.
2. You should apply L'Hospital's rule twice, and after the second time you should end up with  $\lim_{x \rightarrow 0^+} 2x$ .
3. The answer should be the same as the previous one.
4. You should get  $e$ .
5. You should get 1.
6. You should get that  $x = 15$ . (This problem is *a lot* easier if make good choices about the algebra.)
7. At the optimal dimensions, there should be 30 extra feet extending the barn.
8. The dog should jump in when  $5/\sqrt{3}$  meters away from the professor
9. When using the minimum amount of material, you'll use 368.97 square feet of material.