

**Math 245**  
**Induction quiz**  
**April 5, 2010**

Show that for every  $n \geq 1$ ,

$$\frac{1}{1 \cdot 2} + \frac{1}{2 \cdot 3} + \dots + \frac{1}{n \cdot (n+1)} = \frac{n}{n+1}.$$