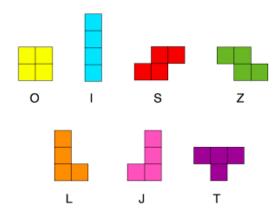
Name: Date: Friday, December 2, 2016

## MATH 181 F1 Quiz #11

**Directions:** You have 15 minutes for this quiz. Please write clearly and justify your answers.



Show rigorously that block I can tile the plane only by translations.

Show rigorously that block Z can tile the plane only by translations.

Show rigorously that block L can tile the plane only by translations.