

# MATH 299Q: Homework 3

## Quiver Representations

1. Let  $Q = 1 \longrightarrow 2 \longrightarrow 3$ , construct the Auslander-Reiten quiver  $\Gamma_Q$ .
2. Generalize the result of 1 to an arbitrary length quiver with the same orientation, i.e.  $\overrightarrow{\mathbb{A}}_n$  or  $Q$  is of the form  $Q = 1 \longrightarrow \cdots \longrightarrow n$  and construct the Auslander-Reiten quiver  $\Gamma_Q$ .