

## Module M: Understanding Matrices Algebraically

### Readiness Assurance Outcomes

Before beginning this module, each student should be able to...

- Compose functions of real numbers.
- Identify the domain and codomain of linear transformations.
- Find the matrix corresponding to a linear transformation and compute the image of a vector given a standard matrix **A2**
- Determine if a linear transformation is injective and/or surjective **A4**
- Interpret the ideas of injectivity and surjectivity in multiple ways.

### Readiness Assurance Resources

The following resources will help you prepare for this module.

- Function composition (Khan Academy): <http://bit.ly/2wkz7f3>
- Domain and codomain: <https://www.youtube.com/watch?v=BQMyeQ0Lvpg>
- Interpreting injectivity and surjectivity in many ways: <https://www.youtube.com/watch?v=WpUv72Y6D10>