## Pathways Reading Guide M2 I6 Distance Formula and Equation of a Circle

Please read Module 2, section 6 in your e-book, pp. $44-49$. (Click on Module 2, then "text.")

Be sure to read with a pencil in hand and attempt the examples before you read the solution given.
Take notes of important definitions and ideas as you read. I don't expect you to have 100\% comprehension of everything in the section, but spending significant time trying to understand the main ideas will assist you as you work on the Investigation during our next class.

Key Ideas:

1. The distance formula is simply an application of the Pythagorean Theorem
2. The equation of a circle is an application of the distance formula

Be able to:

- Explain the derivation of the distance formula.
- Use the distance formula to find the distance between two points.
- Explain the derivation of the standard form for a circle.
- Write an equation for a circle given radius and a point.

