Linear algebra concept maps

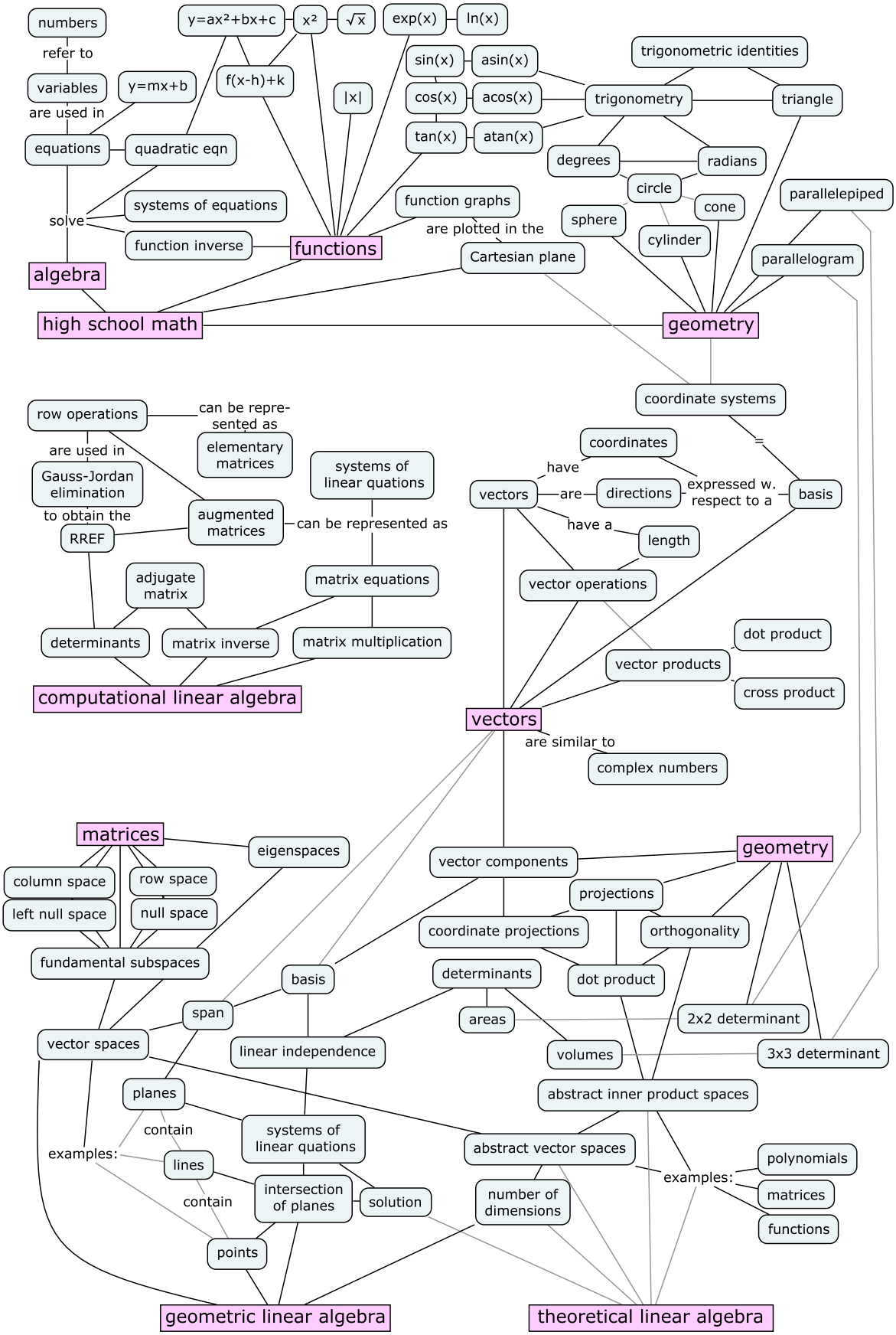

Figure 1: Overview of linear algebra concepts and topics.

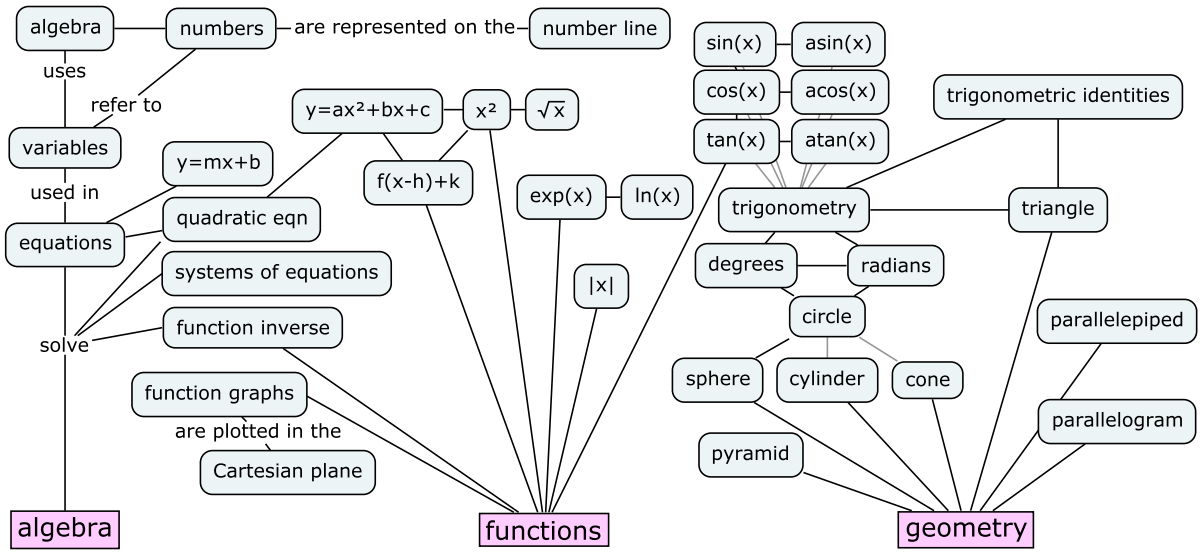

Figure 2: The **math prerequisites** needed to learn linear algebra include high school algebra, equations, functions, and some basic familiarity with geometry concepts.

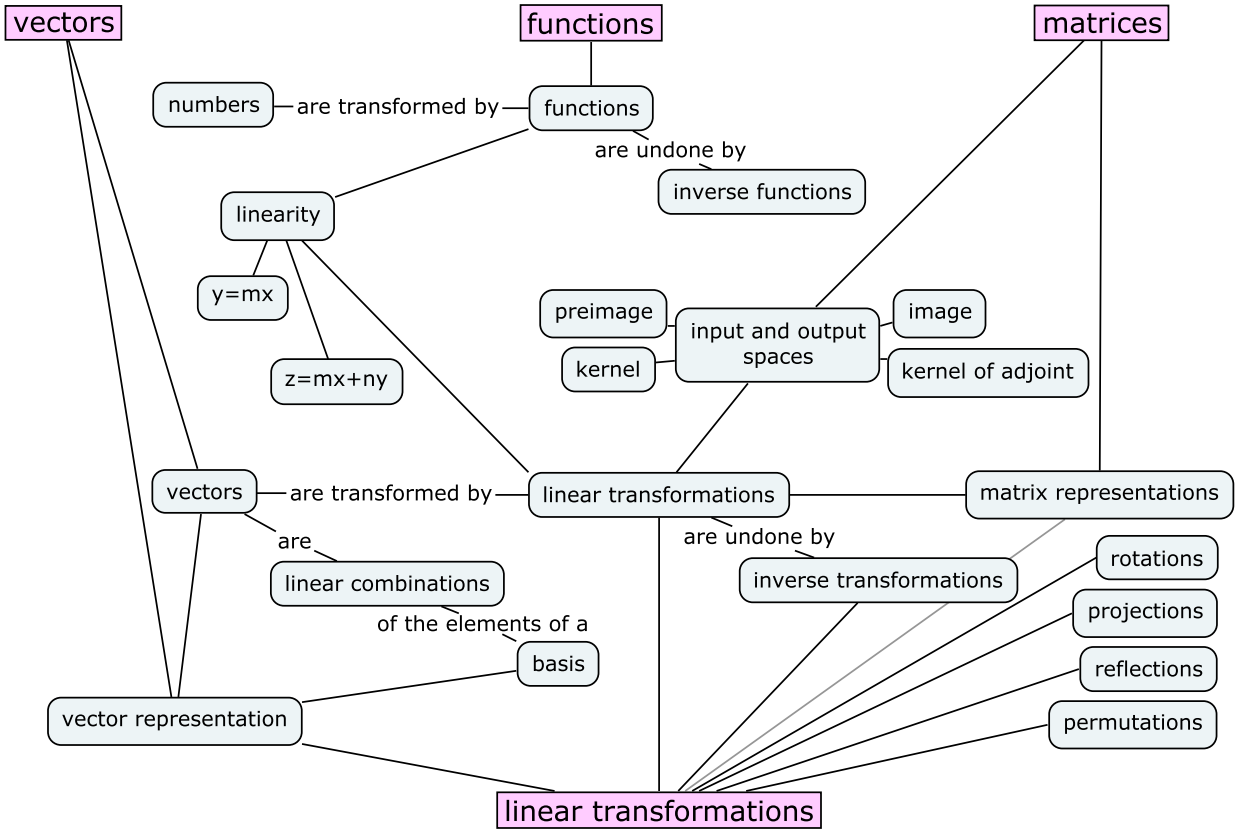

Figure 3: Linear transformations are the most important concept in linear algebra.

You can annotate the concept maps with your current knowledge of each concept to keep track of your progress. Add a single dot (•) next to all concepts you've heard of, two dots (••) next to concepts you think you know, and three dots (•••) next to concepts you've used in exercises. By collecting some dots every week, you'll be able to learn linear algebra in no time at all.

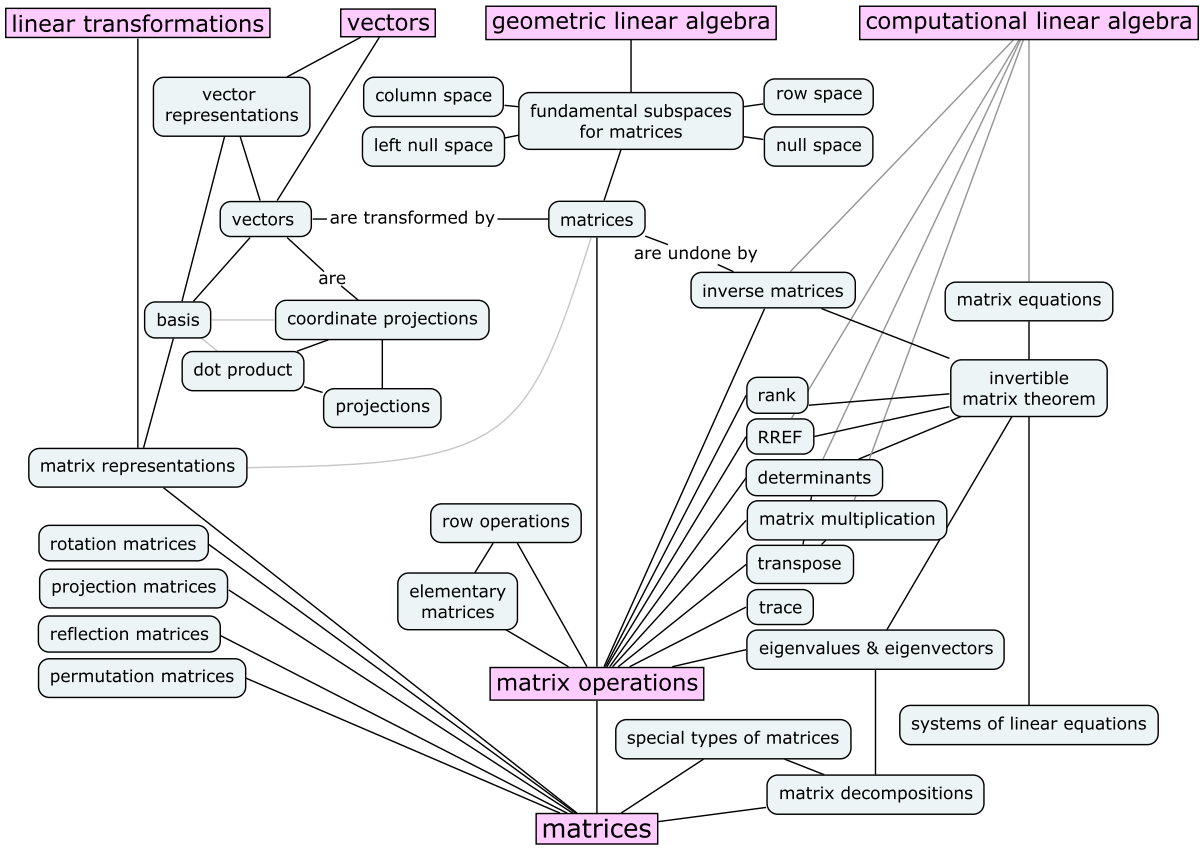

Figure 4: Matrix computations play an important role in science and engineering. Matrices are used to represent linear transformations, systems of linear equations, and geometric operations.

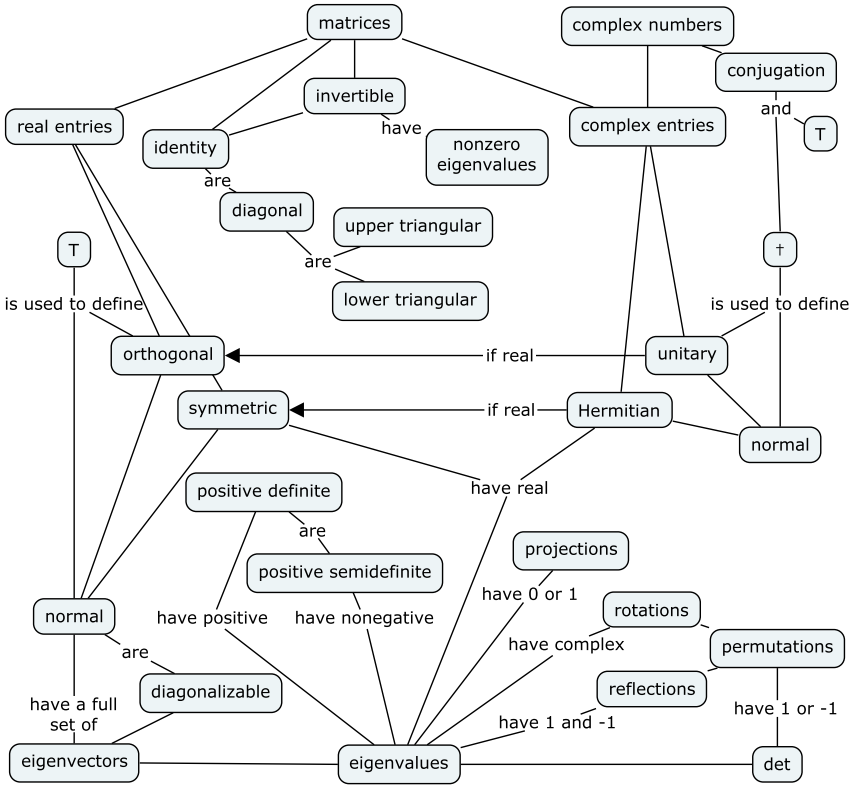

Figure 5: The connections and relations between special types of matrices.

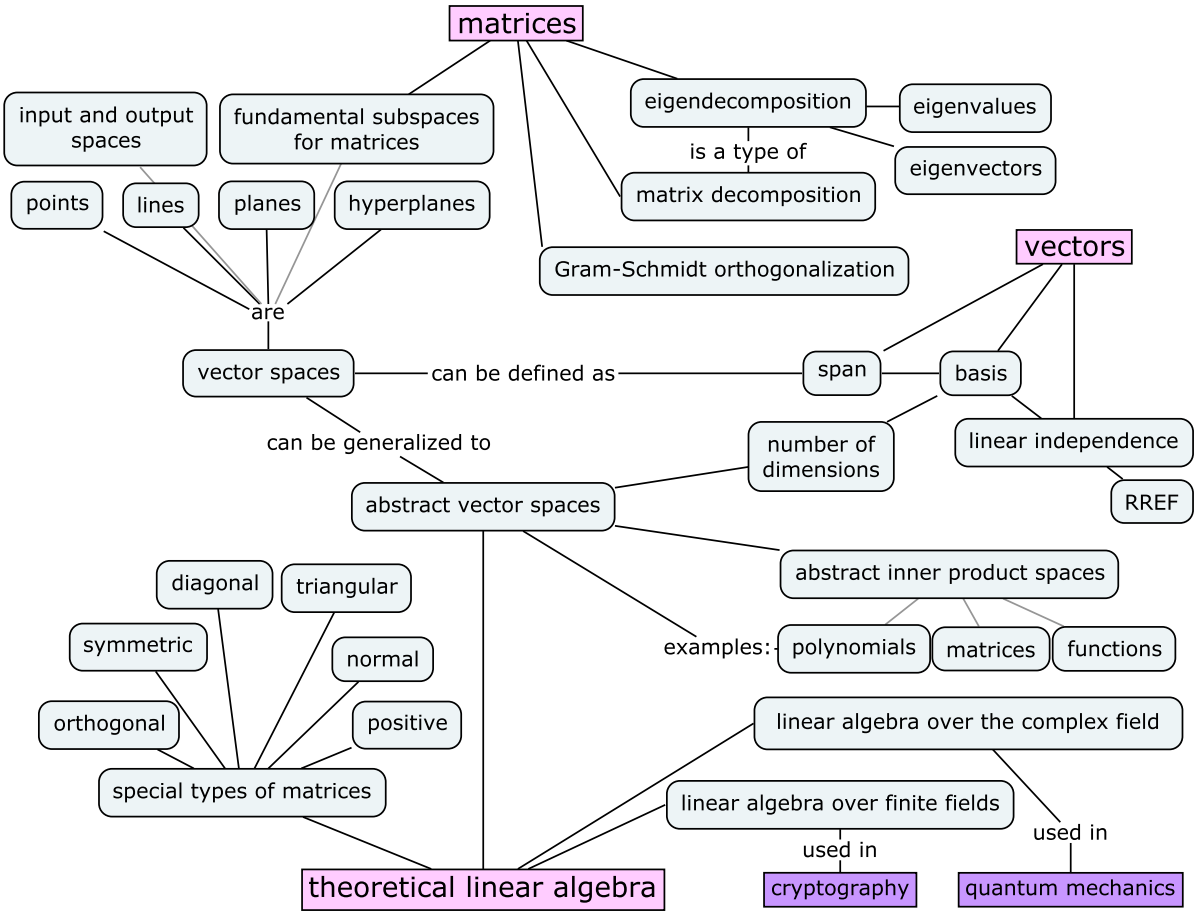

Figure 6: Theoretical aspects of linear algebra.

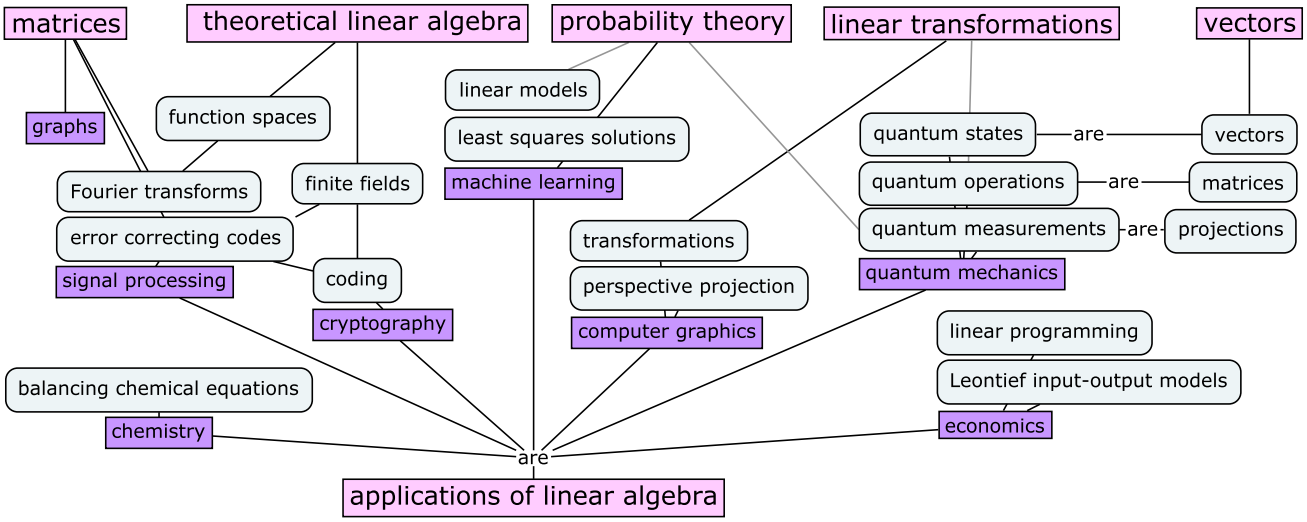

Figure 7: Linear algebra has applications to physics, chemistry, biology, economics, business, computing, signal processing, probability theory, and quantum mechanics.

To learn more about these topics, check out the **No Bullshit Guide to Linear Algebra** by Ivan Savov (Minireference Publishing, v2.2 2020, ISBN 0992001021) available in print from lulu `bit.ly/noBSLA-sc` or amazon `amazon.com/dp/0992001021`. The book is also available as a digital download from gumroad `gum.co/noBSLA`. See the website `minireference.com` for more info and additional resources.