

K-12 Mathematics Purpose Statement

The purpose of K-12 Mathematics in Roseville Area Schools is to provide a challenging mathematics program that offers each student the opportunity to learn mathematical concepts and procedures with understanding and competence. This understanding will result in lifelong learners who value mathematics, demonstrate confidence and flexibility in their abilities to identify, analyze and solve problems, and can communicate and reason mathematically.

Adapted from:

Principles and Standards for School Mathematics (NCTM, 2000)

EdThoughts: What We Know about Mathematics Teaching and Learning (McRel, 2002)

K-12 Mathematics Program Learning Goals

Students will be able to:

1. *Understand*
Comprehend mathematical concepts, operations and relations-know what mathematical symbols, diagrams and procedures mean.
2. *Compute*
Carry out mathematical procedures flexibly, accurately, efficiently, and appropriately.
3. *Apply*
Formulate problems mathematically and devise strategies for solving them using concepts and procedures appropriately.
4. *Reason*
Use logic to explain and justify a solution to a problem or invent new procedures or modify old ones to solve new problems.
5. *Engage*
See mathematics as sensible, useful, and doable.

Adapted from:

Helping Children Learn Mathematics (NRC, 2002)