

New Mexico Process Standards for K-12 Mathematics

<p>Problem Solving Instructional programs from kindergarten through grade 12 should enable all students to—</p>	<ul style="list-style-type: none"> ➤ Build new mathematical knowledge through problem solving ➤ Solve problems that arise in mathematics and in other contexts ➤ Apply and adapt a variety of appropriate strategies to solve problems ➤ Monitor and reflect on the process of mathematical problem solving
<p>Reasoning and Proof Instructional programs from kindergarten through grade 12 should enable all students to—</p>	<ul style="list-style-type: none"> ➤ Recognize reasoning and proof as fundamental aspects of mathematics ➤ Make and investigate mathematical conjectures ➤ Develop and evaluate mathematical arguments and proofs ➤ Select and use various types of reasoning and methods of proof
<p>Communication Instructional programs from kindergarten through grade 12 should enable all students to—</p>	<ul style="list-style-type: none"> ➤ Organize and consolidate their mathematical thinking through communication ➤ Communicate their mathematical thinking coherently and clearly to peers, teachers, and others ➤ Analyze and evaluate the mathematical thinking and strategies of others; ➤ Use the language of mathematics to express mathematical ideas precisely.
<p>Connections Instructional programs from kindergarten through grade 12 should enable all students to—</p>	<ul style="list-style-type: none"> ➤ Recognize and use connections among mathematical ideas ➤ Understand how mathematical ideas interconnect and build on one another to produce a coherent whole ➤ Recognize and apply mathematics in contexts outside of mathematics
<p>Representation Instructional programs from kindergarten through grade 12 should enable all students to—</p>	<ul style="list-style-type: none"> ➤ Create and use representations to organize, record, and communicate mathematical ideas ➤ Select, apply, and translate among mathematical representations to solve problems ➤ Use representations to model and interpret physical, social, and mathematical phenomena

Adapted from National Council of Teachers of Mathematics Standards