

**Content Standard D
Eighth Grade Level
Reasoning**

Students use logic and reason to solve mathematical problems.

State Mathematics Performance Standards 6 th -8 th	KGBSD Performance Standards	State Grade Level Expectations (GLE's)
<p>M9.3.1 Use informal deductive and inductive reasoning in both concrete and abstract contexts.</p> <p>M9.3.2 State counterexamples to disprove statements.</p> <p>M9.3.3 Justify and defend the validity of mathematical strategies and solutions using examples and counterexamples.</p>	<p>1.1 Recognize and use deductive and inductive reasoning in concrete and abstract situations</p> <p>2.1 Give examples to explain or demonstrate why a statement is false</p> <p>3.1 Use examples to defend methods and solutions to problems</p>	<p><u>Reasoning (for local assessment)</u> The student demonstrates an ability to use logic and reason by</p> <p>[8] PS-4 generalizing from patterns of observations (inductive reasoning) about mathematical problems and testing using a logical verification (deductive reasoning); or justifying and defending the validity of mathematical strategies and solutions using examples and counterexamples (M9.3.1, M9.3.2, & M9.3.3)</p>