

**East Providence Public Schools
Mathematics Checklist Grades 8-12**

Student _____ **Date** _____

- Identifies the relevant problem, question or task and distinguishes between useful and extraneous information. 5.1.1 and 5.1.2
- Chooses and applies an appropriate problem-solving 5.1.3
 - make an organized list
 - create a diagram/picture/chart
 - organize data with a graph or table
 - determine a pattern
 - identify and use formulas
 - work backwards
 - make a simpler problem
 - create a mathematical model
 - trial and error
 - work backwards
 - use logical reasoning
 - simulate the problem
- Uses informal and formal reasoning and proof to explain and justify conclusions. 5.2.2
- Articulates ideas clearly and logically in written and/or oral form. 6.1.1
- Explains and justifies their thinking and develop increasingly sophisticated questions and solutions for given problem-situations. 6.1.1
- Chooses appropriate representations and mathematical language (e.g., spreadsheets, geometric models, algebraic symbols, tables, graphs, matrices) to present ideas clearly and logically for a given situation. 6.2.1
- Produces a correct solution with a minor error
- Reflects on the reasonableness of the answer and identifies strengths and weaknesses of the process. 6.1.3 and 6.3.4