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| 1. **Make Sense of Problems and Persevere in Solving them.**  * explain the problem to yourself – what is it asking you to do? * organize a plan to solve the problem – draw a picture, write an equation, make a table * check to make sure your answer makes sense | 1. **Reason Abstractly and Quantitatively.**  * contextualize variables * represent the problem symbolically – translate words into symbols and numbers |
| 1. **Construct Viable Arguments and Critique the Reasoning of Others.**  * use assumptions, definitions, and prior knowledge to construct arguments * justify and explain your conclusions using examples and counterexamples * identify correct and flawed logic | 1. **Model with Mathematics.**  * apply what math skills you know to solve problems in everyday life * use different methods that you’ve previously learned to solve problems – diagrams or pictures, graphs, charts or tables, formulas or equations * approximate numbers to simplify problems |
| 1. **Use Appropriate Tools Strategically**  * use tools such as pencil, paper, concrete models, ruler, protractor, calculator, or a computer * understand how and when to use different tools for a given situation | 1. **Attend to Precision**  * use proper vocabulary and clear definitions to communicate and exchange ideas * calculate accurately and efficiently * express answers completely using appropriate units of measure or labels related to the problem |
| 1. **Look For and Make Use of Structure**  * look for a pattern * piece steps together to build a bigger picture – formulate a rule | 1. **Look For and Express Regularity in Repeated Reasoning**  * look for repeated patterns, relationships, and shortcuts |