

Small Gas Engines (SGE) Common Core State Standards for High School Mathematics Alignment

		Unit 1 – Safety and Expectations	Unit 2 – Engines	Unit 3 – Diagnostics
CCSS: Conceptual Category – Number and Quantity				
The Real Number System	Extend the properties of exponents to rational exponents.			
	Use properties of rational and irrational numbers.	x	x	x
Quantities	*Reason quantitatively and use units to solve problems.			
The Complex Number System	Perform arithmetic operations with complex numbers.			
	Represent complex numbers and their operations on the complex plane.			
	Use complex numbers in polynomial identities and equations.			
Vector and Matrix Quantities	Represent and model with vector quantities.			
	Perform operations on vectors.			
	Perform operations on matrices and use matrices in applications.			
CCSS: Conceptual Category – Statistics and Probability				
Interpreting Categorical and Quantitative Data	*Summarize, represent, and interpret data on a single count or measurement variable.			
	*Summarize, represent, and interpret data on two categorical and quantitative variables.			
	*Interpret linear models.			
Making Inferences and Justifying Conclusions	*Understand and evaluate random processes underlying statistical experiments.			
	*Make inferences and justify conclusions from sample surveys, experiments, and observational studies.			
Conditional Probability and the Rules of Probability	*Understand independence and conditional probability and use them to interpret data.			
	*Use the rules of probability to compute probabilities of compound events in a uniform probability model.			
Using Probability to Make Decisions	*Calculate expected values and use them to solve problems.			
	*Use probability to evaluate outcomes of decisions.			x