Grades 8-9 Math Entrance Exam Portion

The Tools of Algebra	Translate Verbal phrase to numerical expression.
	Evaluate expressions containing variables.
	Use Ordered pairs.
Operations with integers	Find absolute value of expressions.
	Add/subtract more than 2 integers.
	Graph algebraic expression
Operations with rational numbers	Write Fractions as repeating or terminating decimals.
	Multiply negative and positive fractions.
	Evaluate algebraic expressions with fractions.
	Add / subtract unlike fractions.
Expressions and equations	Solve equation by addition and subtractions.
	Solve real world problem involving 2 step equations.
Multi-step equations and Inequalities. Graphing	Solve equation with variable on each sides.
	Write / Graph inequalities.
	Express percent as decimal and vice versa.
	Apply percentage in real life problems.
	Determine a relation as function or not.
	Find nth terms in sequences.
	Graph linear equation using ordered pairs.
	Find slope (rate of change).
	Find Y-intercept.
	Graph lines using slope and Y intercept
	Write equations with given slope and Y-intercept.
	Find distance between 2 given points.
	Find midpoint between 2 given points
Geometry	Measure and classify angles.
	Identify and name polygons.
	Find circumference / area of a circle.
	Area of a triangle.
	Find volume of 3-D shapes.