

Activity Number	Topics/Topics	Explanation/Notes
1	Scientific Notation, Significant Figures, calculating roots and powers.	
2	Units and Unit Conversions	
3	Writing equations from sentences, drawing diagrams based on sentences.	
4	Proportions and ratios.	May want to supplement here to include some inverse-square law since book only does linear ratios.
5 and 6	Linear equations.	Making plots and slope finding.
7 and 8	Basic Algebra.	Solving linear equations. Second activity could maybe be "problem solving".
9	Simultaneous Linear Equations.	Two equations/two unknowns.
10 and 11	Geometry	Drawing shapes (triangles mostly) and finding angles from figures.
12 and 13	Trigonometry.	Finding sine, cosine, tangent in all quadrants, sides of triangles, finding angles, law of sines and cosines.
14 and 15	Vectors.	Not in text, so completely up to us.
16	Quadratic equations.	Both solving and graphing.
17	Other powers.	Cubic and square-root function. (Good use of pendulums in text.)
18	Sinusoidal functions.	Plotting basic shapes,

		changing period, amplitude, and other characteristics. Also radians introduced.
19	Exponential Growth and Decay, Logarithms.	
20	Derivatives.	Derivative as slope, polynomials as example. Max and min of polynomial functions.
21	“Geometric” Integration	Integral as area under curve.
22	“Mathematical” Integration.	Integral as anti-derivative. Integral table and examples. Book does this material first, but I think the order given makes more sense.