Essential Skills

- Determine whether a relation is a function or not
- Interpret and Apply Function Notation
- Identify and interpret transformations of functions – graphically & algebraically
- Find the inverse of a function – graphically & algebraically

MCR 3UI: Unit 3: Transformations of Functions

Day	Section	Topic	Practice	Done ✓
1	3.1	**Functions, Function Notation, Domain and Range**	Worksheet Parts A & B (See web-site)	
2	3.1 3.2	Graphing and finding properties of $y = \frac{1}{x}$ and $y = \sqrt{x}$ Lesson on Handout	Master graphing the root function and the reciprocal function. Understand the domain and range of these two functions. Finish U3D1 Worksheets, Complete Parent Function Summary	
3	3.3	**Horizontal and Vertical Translations of Functions**	p. 189 #1,2,3,4i,5(no check), 7, 15, 16, **10, 13, 17** See web-site for Extra Practice Worksheet	
4	3.4	**Reflections of Functions**	p. 203 #1c, 2abc, 3, 5, 7, 10 See web-site for Quiz Review	
5	3.5	**QUIZ!!!** **Inverse Functions Day I**	p. 215 #3a, 5	
6	3.5	**Inverse Functions Day II**	p. 215 #10ii,v, 12, 13cg, 14iv, vi, 15b, **22, 23**	
7	3.6	**Stretches and Compressions of Functions** - Vertical Stretches and Compressions - Horizontal Stretches and Compressions	p. 229 #3, 4ii, 5(odd), 6(odd), 7, 11(odd) See web-site for 2 extra practice worksheets	
8	3.7	**Combinations of Functions** (YES!! Let's combine all the reflections, stretches, translations into one equation!!)	Worksheet (See web-site) p. 240 #7(odd), 8-9(odd, sketch one from each), 14	
9		**Review**	Worksheet (in note booklet) Extra Practice: Worksheet on web-site, Pages 246-256	
10		**TEST**		

Note: "odd" means complete every other question. For example, #7(odd), means to complete question 7 parts a), c), e), …etc.

Optional extra handouts will be available on the course web-site to practice throughout the unit.