**3UI - Unit 6 Sinusoidal Functions**

At the end of the unit students will be able to:

* demonstrate an understanding of periodic relationships and sinusoidal functions, and make connections between the numeric, graphical, and algebraic representations of sinusoidal functions;

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| **Date** | **Topic** | **Practise** |
| Wed. Nov. 26 | 6.1 Periodic Functions &6.2 Sinusoidal FunctionsLG: Interpret & describe graphs that repeat at reg. intervalsLG: Examine the 2 fns associated with sinusoidal functions | p. 352 #1 – 8p. 363 #1 – 4, 9 [15,16] |
| Thurs. Nov. 27 | 6.3 Interpreting Sinusoidal FunctionsLG: Relate details of sinusoidal phenomenon to their graph | p. 363 #8p. 370 #1 – 8, 13 [15] |
| Fri. Nov. 28 | **Quiz**6.4 Transformations of Sinusoidal FnsLG: Determine how changing the values of *a, c*, *d*, and *k* affect the graphs of *f*(*x*)= *a*sin(*k*(*x -* *d*) )+*c* and *f*(*x*) =*a*cos(*k*(*x*-*d*) )+*c* | p. 377 A – Up. 379 #1 – 3 |
| Mon. Dec. 1 | 6.5 Graphing Sinusoidal FunctionsLG: Sketch the graphs of sinusoidal functions using transformations | p. 383 #1 – 4 [12] |
| Tues. Dec. 2 | 6.5 Graphing Sinusoidal Functions cont…LG: Sketch the graphs of sinusoidal functions using transformations | p. 384 #5 – 9[13] |
| Wed. Dec. 3 | 6.6 Investigating Models of Sinusoidal FnsLG: Determine the equation from a graph or table of values | p. 391 #1 – 6, 9, 12 [13,14] |
| Thurs. Dec. 4 | **Quiz**6.7 Problems with Sinusoidal FnsLG: Solve problems related to real world applications | p. 398 #1 – 4, 6, 7, 9 [13] |
| Fri. Dec. 5 | **ASSIGNMENT IN CLASS** | Finish AssignmentReviewp. 404 #1 – 3, 6, 8 – 10, 12, 13 |
| Mon. Dec. 8 | HAND IN ASSIGNMENTTake up assignment as reviewTake up Review Questions | Redo Questions from review you are unsure about |
| Tues. Dec. 9 | **Unit Test** | p. 414 #1 – 6(If any of these understandings are missing, get help ASAP!) |

* identify and represent sinusoidal functions, and solve problems involving sinusoidal functions, including problems arising from real-world applications