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|  |  | **Investigations** | **Topics** |
| ***JAN*** | 15 | Martin Luther King Day | No Classes |
|  | 16 | 2.1 | Course Overview; Quantities and covariation of quantities  |
|  | 17 | 2.2 | Representing quantities and changes in quantities |
|  | 18 | 2.3 | Constant rate of change/Linear Relationships |
| *Monday, January 22, is last day to add a full-term class or change sections of a class* |
|  | 22 | 2.3 Additional Content | Skill day; writing equations for lines |
|  | 23 | 2.4 | Constant rate of change and proportionality |
|  | 24 | 2.4 | Proportional changes in quantities vs proportional quantities |
|  | 25 | 2.5 | Average rate of change |
| *Monday, January 29, is last day to drop any or all courses that meet the full semester before a grade of “W” is assigned.* |
|  |  29 | 2.6 | Distance formula; Equation of a circle  |
|  |  30 | 2.6/2.7 | Circles; Absolute value equations[**(use ebook)**](http://www.math.kent.edu/~mathweb/ebooks/FUNMATHV/ch2_8.htm) |
|  |  31 | 2.7 | Absolute value inequalities [**(use ebook)**](http://www.math.kent.edu/~mathweb/ebooks/FUNMATHV/ch2_8.htm)  |
| ***FEB*** | 1 |  | Review |
|  | 5 | ***Exam*** | ***Module 2*** |
|  | 6 | 3.0 | Relevant skills and procedures  |
|  | 7 | 3.1 | The Box Problem |
|  | 8 | 3.2 | Functions, domains |
|  | 12 | Supplementary | Skill day; Domains  |
|  | 13 |  | Radical Functions; Piecewise functions |
|  | 14 | 3.3 | Function notation |
|  | 15 | 3.7 | Difference quotients |
|  | 19 | 3.4  | Function composition |
|  | 20 | 3.4 or 3.5 | Function composition |
|  | 21 | 3.6 | Inverse functions |
|  | 22 | 3.6 | Inverse functions, cont’d; review |
|  | 26 | ***Exam 3*** | Module 3 |
|  |  27 | 4.1 | Percentages, Percent change |
|  | 28 | 4.2 | Comparing linear and exponential growth |
|  | 29 | 4.3 | 1- unit growth factors and decay factors; percent change; Initial values |
| ***MAR*** | 4 | 4.4 | Partial and *n-*unit growth factors |
|  | 5 | 4.5 | *n-*unit growth and decay factors  |
|  | 6 | 4.6 | Compound Interest |
|  | 7 | 4.7 | Motivating *e* |
| ***MAR***  | 11 | 4.8 | Intro to logarithms; Graphs of log functions |
| *Cont’d* | 12 | 4.8 | Properties of logarithms |
|  | 13 | 4.9 | Solving exponential and log equations |
|  | 14 | 4.9 | Solving exponential and log equations/Review |
|  | 18 | ***Exam 4*** | Module 4 |
|  | 19 | 5.4 | Quadratic Functions |
|  | 20 | 5.4 | Quadratic Functions: *Completing the square* |
|  | 21 | 5.4 | Quadratic Functions; cont’d |
|  | 25 | *Spring Recess. No Classes**Office Open* |
|  | 31 |
| *Monday, April 1, is the last day to withdraw from any course that meets the full term using flashfast (A grade of W is assigned)* |
|  | 1 | 5.3 | Transformations of polynomial functions  |
|  | 2 | 5.3 | Transformations of polynomial functions; symmetry |
|  | 3 | 5.5 | End behavior and graphs of polynomial functions  |
|  | 4 | 5.5 | Graphs of polynomial functions; polynomial inequalities |
|  | 8 | 5.5 | Roots of polynomial functions – Factor Theorem; long division |
|  | 9 | 5.5 | Roots of polynomial functions, cont’d |
|  | 10 |  |  |
|  | 11 |  | Review |
|  | 15 | ***Exam 5*** | Module 5, Investigations 3 – 5 + supplementary material |
|  | 16 |  | Systems of Equations |
|  | 17 |  | Systems of Equations |
|  | 18 | Supplementary | Solving Rational Equations |
|  | 22 | 6.1 | Domain and vertical asymptotes of rational functions |
|  | 23 | 6.2 | End behavior of rational functions |
|  | 24 | 6.3 | Zeros of rational functions; holes |
|  | 25 | 6.3 | Graphing rational functions |
|  | 29 | 6.3 | Graphing rational functions |
|  | 30 | 6.3 | Graphing rational functions |
| ***MAY*** | 1 |  ***Exam*** | ***Mod 6 & Systems of Equations***  |
|  | 2 |  | ***Review for Final Exam*** |
|  | 7 | ***FINAL EXAM***  | 3:15 – 5:30 PM  |