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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 |