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| **Date** | **Class** | **HW Assignment** |
| Fri  11/14 | 4.1 Extreme Value Theorem; maxs and mins on closed interval | * 4.1 Math XL |
| Tue  11/17  (Mon snow day!) | 4.1 critical points, maxs and mins in general; introduce sign chart | * 4.1 Math XL |
| Wed  11/19 | 4.2 Mean Value Theorem    Calculus in Motion software | * Worksheet on mean value theorem * Page 202 #1 – 7 odd, 11, 13, 53, 56 |
| Thursday  11/20 | 4.2: Determining when a function is increasing or decreasing | Book p. 202: #15, 17, 21, 23, 24, 25, 54 |
| Friday, Mon, Tue  11/21, 24, 25 | 4.3 connecting a function with its second derivative | XL: #1-7  Book: #9, 22, 24, 13, 15 |
| Mon  12/1 | 4.3 describing f from its first and second derivative | XL: #8  Book: #29, 55, 56, 59  Function Analysis Packet: TBA |
| Tue/Wed  12/2-3 | Review 4.1-4.3 | Review 4.1-4.3 Wksht  F, f’, f’’ worksheet |
| Thur  12/4 | **Quiz 4.1-4.3** | NONE |
| Friday  12/5 | 4.4 Optimization | * Worksheet p. 250: #1, 2,4,5,7 |
| Monday  12/8 | 4.4 Optimization Cont’d | * Worksheet p. 250: #8,10,13,14,19 |
| Tue  12/9 | 4.4 Continued (Snowmobiles and pop cans if time); | * Math XL 4.4 * Wksht. p. 226: #6 |
| Wed/Thur, 12/10-11 | 4.4 Review | * Worksheet |
| Friday, 12/12 | **4.4 Quiz** | Exam review TBA |
| Mon/Tue  12/15-16 | **Exam Review** | Exam Review TBA |
| January 5th-16th | **4.6: Related Rates: Pythagorean Theorem** | Packet: p. 66: #8; p. 68: #8; p. 71: #18,19; p. 73: #25  Book: p. 252: #35  Packet: p. 65: #6,7; p. 68: #6,7; p. 69: #9; p. 72: #23; p. 74: #27  Book: p. 252: #13, 14, 32 |
|  | **4.6: Related Rates: Change in Angle** | Packet: p. 65: #7; p. 69: #10, 12; p. 70: #16  Book: p. 252: #21b, 31, 33, 34 |
|  | **4.6: Related Rates: Rectangles, Circles, Cylinders, Boxes** | Packet: p. 63: #2, 3; p. 64: #4, 5; p. 67: #1; p. 68: #4; p. 70: #15  Book: p. 252: #9, 38, 39 |
|  | **4.6: Related Rates: Cones and Spheres** | Packet: p. 66: #9, 10; p. 67: #3; p. 71: #17; p. 72: #22  Book: p. 252: #16, 17  Packet: p. 67: #2; p. 68: #5; p. 70: #14; p. 71: #20; p. 74: #26  Book: p. 252: #11, 27 |
|  | **4.6: Shadows and Miscellaneous** | p. 253: #29, 30 (shadow)  p. 254: #43, 44 |
|  | **Review** | TBA (likely 4.6 XL and review worksheet) |
|  | **4.6 Quiz (Estimated to be January 15th-16th)** |  |
| Tues-Fri, 1/21-24 | * 4.6 Related Rates- triangles, circles, boxes, and spheres; Calculus in Motion demo (did a ladder problem) * Cones, change in angle, shadows | * Math XL 4.6 * Book p. 251: #21a, 22 * P.252: #17, 21b,29 * P. 252: #9,13,14,32,19,11,27,17 * 29,31,33,34 * Review sheet |
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|  | Go over Quiz 4.4; more related rates; rectangle (area, perimeter, diagonals) | * Only right triangle problems and rectangle * Math XL 4.6: #1,3, * Book p. 252: #21a, 22 |
|  | 4.6 Related Rates cont’d work on problems in class | * Math XL 4.6 #2, 4 * Book p. 252: #17, 21b, 29 |
|  | 4.6 cont’d | * Math XL 4.6: #1-4 * Book P. 252: #9, 13, 14, 21a, 22, 32, 14, 19, 11, 27, 17 |
|  | 4.6 Review; cones, change in angle, shadow; | * change in angles and/or shadow (need to use proportions from similar triangles): #21b, 29, 31, 33, 34 * Select Worksheet #’s in class (might just use as class examples) |
|  | Chapter 4 Review; Optional Take home 4.6 Quiz due Monday | * Chapter 4 Review Wksht. |
|  | Chapter 4 Review | * Worksheet |
|  | **Chapter 4 Test** | * STUDY |
|  | **Chapter 4 Test** | * Review sheet |
|  | EXAM REVIEW and EXAM  Chapters 2, 3, 4 | * TBA |