MAT296

| Section | WebAssign Problems | Written Homework | Remarks |
| :---: | :---: | :---: | :---: |
| 5.5 | $\begin{aligned} & 11,13,14,17,19,35, \\ & 41,51,533 \mathrm{XP} \end{aligned}$ | none | integration by substitution review |
| 7.1 | $\begin{aligned} & 1,3,9,36,501 \mathrm{XP}, \\ & 503 \mathrm{XP} \end{aligned}$ | 12, 16, 20 | area between two curves |
| 7.2a | 3, 5, 7, 522XP | none | volumes by disks/washers - rotation about an axis |
| 7.2b | 9, 12, 503XP | 16, 18 | volumes by disks/washers - rotation about a shifted axis |
| 7.3a | $\begin{aligned} & 5,7,9,11,33,34, \\ & 502 \mathrm{XP}, 504 \mathrm{XP} \end{aligned}$ | 6 | volumbes by shells - rotation about an axis |
| 7.3b | 15, 17, 19, 505XP | 18,38 | volumes by shells - rotation about a shifted axis |
| 6.1 | $\begin{array}{\|l\|} \hline 1,3,5,9,11,525 X P, 13, \\ 8,502 X P, 533 X P \end{array}$ | 10, 20, 24 | integration by parts |
| 6.2a | 1, 3, 9 | 4, 8 | sine/cosine integrals |
| 6.2 b | 17, 19, 21, 25 | 18, 24 | tangent/secant integrals |
| 6.2c | 40, 42, 47, 51, 53, 55 | 40, 46, 58 | trig sub |
| 6.3a | 12, 18, 524XP | 10 | partial fractions - distinct linear factors |
| 6.3b | 19, 32, 519XP | 16 | partial fractions - long division |
| 6.3c | 22, 23, 517XP | 24 | partial fractions - quadratic factors, but no powers |
| 6.6 | $\begin{aligned} & 7,9,13,16,17,23,27, \\ & 32,41 \end{aligned}$ | 12, 34, 24, Ch6 Review True/False: 7, $10,11$ | improper integrals |
| 7.4 | 7, 11, 511XP | 8, 10 | arc length |
| 7.7 | 3, 8, 9, 15, 24, 43 | none | differential equations |
| 8.1 | 9, 10, 11, 12, 15, 23, 24 | none | sequences |
| 8.2 | $\begin{aligned} & 1,7,9,10,12,508 \mathrm{XP}, \\ & 15,16,17,35,514 \mathrm{XP} \end{aligned}$ | 4, 6, 36 | definition of series, convergence, geometric series, harmonic series, divergence test |
| 8.3 | $3,4,13,15,19,21$, $503 \mathrm{XP}, 523 \mathrm{XP}, 9,25$, $26,29,528 \mathrm{XP}$ | 6, 10, 12, 14, 18, 22, 30 | integral test, p -series, comparison tests |
| 8.4 | $\begin{aligned} & 3,5,7,501 \mathrm{XP}, 507 \mathrm{XP}, \\ & 23,521 \mathrm{XP}, 533 \mathrm{XP}, 19, \\ & 21,25,43 \end{aligned}$ | 6, 18, 30, 20, 24, 26 | alternating series test (no error estimate), conditional/absolute convergence, ratio test |
| 8.5 | $\begin{aligned} & 5,7,9,15,501 \mathrm{XP}, 11, \\ & 18,19,23,502 \mathrm{XP}, \\ & 512 \mathrm{XP} \\ & \hline \end{aligned}$ | 12, 14, 16, 20, 26c | power series |
| 8.6 | $\begin{aligned} & 3,7,13,15,17,39, \\ & 503 \mathrm{XP} \end{aligned}$ | 8,11 | writing functions as power series |
| 8.7 | $\begin{array}{\|l\|} 5,7,11,13,14,17,28, \\ 30,31,44,45,59,61,63 \end{array}$ | 6, 12, 16, 46, 60, 62, 64, Ch8 Review True/False: 1, 9, 12, 17 | Taylor's formula (no error estimate), usking known Taylor series to obtain more series, recognizing known Taylor series |
| 9.1 | 7, 8, 9, 11, 12 | 6,16 | parametric curves |
| 9.2 | 1,2, 4, 7, 12, 13, 21, 26 | 4, 10 | calculus with parametric curves |
| 9.3a | $\begin{aligned} & 4,6,15,19,506 \mathrm{XP}, \\ & 514 \mathrm{XP}, 522 \mathrm{XP} \end{aligned}$ | 16, 20 | converting rectangular/polar coordinates |
| 9.3 b | 27, 31, 33 | 24, 30, 34 | graphing polar curves |
| 9.4 | 5, 7, 502XP, 17, 19, 21 | 6,20 | area inside and between polar curves |


| Exam \#1 <br> Review | Ch. 7 Review \#1-8, 10, 12-14, 19, 20 Ch. 6 Review \#4, 6, 9, 24 | Sections 7.1-7.3, 6.1 |
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| Exam \#2 Review | $\begin{aligned} & \text { Ch. } 6 \text { Review \#5, 15-19, 25, 41-46 } \\ & \text { Ch. } 7 \text { Review \# 25, 26, 27a, 43-45 } \end{aligned}$ | Sections 6.2, 6.3, 6.6, 7.4, 7.7 |
| Exam \#3 Review | Ch. 8 Review. Concept Check \#1, 3, $5 \mathrm{a}-\mathrm{f}, 6,9,11 \mathrm{abcd}$ True/False \#1, 7, 9 Exercises \#1,3,5, 9-13, 15, 21, 25, 28, $29,30,37,41,43,46,47,51$ | Sections 8.1-8.7 |
| Ch. 9 <br> Review | Ch. 9 Review \#1,7-11, 18, 25, 32,33 | Sections 9.1-9.4 |

