

Exam 2 covers lessons 10-17.

Formulas for the Midpoint Rule, Trapezoidal Rule, and Simpson's Rule will be given on the exam if needed.

1. P. 518: 5,6,11,14,15,16,19,20,23,33,42,45,48,57,63.

2. P. 562: 1,4.

Answers to Even Numbered Problems

P.518

6. $\frac{1}{8} (\ln |y - 6| - \ln |y + 2|) + C$

14. $\frac{x^2}{2} - 2x + 6 \ln |x + 2| + C$

16. $\frac{1}{3} \tan^3 \theta + 2 \tan \theta - \cot \theta + C$

20. $\frac{1}{7} \sec^7 \theta - \frac{2}{5} \sec^5 \theta + \frac{1}{3} \sec^3 \theta + C$

42. $\frac{1}{9}$

48. The integral diverges.

P.562

4. (a) $\frac{\pi}{6} (5^{3/2} - 1)$ (b) $\frac{\pi}{32} (18\sqrt{5} - \ln(2 + \sqrt{5}))$