BC Calculus
Test # 9 (1–138) Review Answers

129. A. 10π units^2 B. $\frac{\pi}{2}$ units^2

130. A. Converges by the ratio test
B. Converges by the ratio test
C. Diverges by the divergence theorem
D. Converges by the root test

131. A. Diverges B. Diverges

132. A. Converges by the limit comparison test. The series is the S.O.M. as $\sum \frac{1}{n^2}$, a convergent p-series.
B. Converges by the limit comparison test. The series is a L.O.M. than $\sum \frac{1}{n^{3/2}}$, a convergent p-series.
C. Diverges by the limit comparison test. The series is the S.O.M. as $\sum \frac{1}{n^{5/6}}$, a divergent p-series.

133. A. 19.820 B. 12

134. A. tan(6) B. y=0.199x + 2.344

135. A. Converges absolutely by comparison with $\sum \frac{1}{4n^3}$, a convergent p-series multiple.
B. Diverges by the divergence theorem

136. –1.668

137. $\frac{31}{3} - e^{-2}$

138. A. Converges conditionally by Liebniz's theorem. This is the alternating harmonic series.
B. Diverges by the divergence theorem
C. Converges conditionally by Liebniz's theorem