Calculus Section 9.3 Integral Test
-Use the Integral Test to determine whether an infinite series converges or diverges.

Homework: page 609
#’s 1 – 9 odd, 23 – 27 odd

**The Integral Test**If *f* is positive, continuous, and decreasing for x ≥ 1 and an = f(n), then
 
either both converge or both diverge.

**Examples) Use the Integral test to determine convergence or divergence of each series.**$$\sum\_{n=1}^{\infty }\frac{n}{n^{2}+1}$$

$$\sum\_{n=1}^{\infty }\frac{1}{n^{2}+1}$$

$$\sum\_{n=2}^{\infty }\frac{1}{nln(n)}$$