1035-05-1095   **Sandra L. Gaskins** and **Mark C Ginn*** (`ginnmc@appstate.edu`), Dept. of Mathematical Sciences, Appalachian State University, Boone, NC 28608. *Differentials on Paths and Grids.*

Several years ago, Slater, Goddard and Henning defined the differential of a graph $G = (V, E)$, $\partial(G)$ to be the $max_{X \subseteq V} |bd(X)| - |X|$. This parameter was explored by Lewis in 2004. We extend his work looking at the differential of grids. (Received September 18, 2007)