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Infinite series have been studied at least since the time of Archimedes, and, as was common then, such series had geometric interpretations. However, as mathematicians became more comfortable using algebraic techniques, the geometric connection became unnecessary, leaving behind the question of whether classical series such as Leibniz's series have a geometric interpretation. In the mid-20th century, Viggo Brun answered the question regarding Leibniz's series in the affirmative. Using standard calculus methods, we re-derive Brun's findings and show that these methods apply to other series such as Euler's series for the Euler-Mascheroni constant. (Received September 01, 2015)