1.2 When $n = m$.

Assume equation holds true for $n = m$, so:

$$\sum_{i=1}^{m} \frac{2i+1}{i^2(i+1)^2} = \frac{m^2+2m}{(m+1)^2}$$

1. When $n = m+$

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rove by induction on n that $(3n)! \geq \frac{1}{2} \times 120$ for all natural numbers $\mathbb{N}$ (where $n!$ denotes the product of all natural numbers from 1 to