

<https://www.codecogs.com/latex/eqneditor.php>

$\mathrm{For} \ m=4, \ \mathrm{and} \ \left(p_1, p_2, p_3, p_4 \right) = (a, b, c, d$
 $\mathrm{right})$

$-1 + \frac{1}{1-a} + \frac{1}{1-b} + \frac{1}{1-c} + \frac{1}{1-d} - \frac{1}{1-a-b} - \frac{1}{1-a-c} -$
 $\frac{1}{1-a-d} - \frac{1}{1-b-c} - \frac{1}{1-b-d} - \frac{1}{1-c-d} + \frac{1}{1-a-b-c} + \frac{1}{1-a-b-}$
 $d} + \frac{1}{1-a-c-d} + \frac{1}{1-b-c-d}$

For $m = 4$ and $(p_1, p_2, p_3, p_4) = (a, b, c, d)$

$$\begin{aligned} & -1 + \frac{1}{1-a} + \frac{1}{1-b} + \frac{1}{1-c} + \frac{1}{1-d} - \frac{1}{1-a-b} - \frac{1}{1-a-c} - \frac{1}{1-a-d} - \\ & \frac{1}{1-b-c} - \frac{1}{1-b-d} - \frac{1}{1-c-d} + \frac{1}{1-a-b-c} + \frac{1}{1-a-b-d} + \frac{1}{1-a-c-d} + \\ & \frac{1}{1-b-c-d} \end{aligned}$$