

$$\log F = \Lambda[V][[1]] \quad // \quad d\sigma[\{x, y\} \rightarrow \{y, x\}];$$

$$\log F \quad // \quad \text{EulerE} \quad // \quad \text{adSeries}\left[\frac{e^{\text{ad}} - 1}{\text{ad}}, \log F, \text{tb}\right]$$

$$\left\langle \bar{x} \rightarrow \text{LS} \left[\frac{\bar{y}}{2}, \frac{\bar{x}\bar{y}}{6}, \frac{1}{24} \overline{\bar{x}\bar{y}y}, -\frac{1}{180} \overline{\bar{x}\bar{x}\bar{x}\bar{y}} + \frac{1}{80} \overline{\bar{x}\bar{x}\bar{y}y} + \frac{1}{360} \overline{\bar{x}\bar{y}y\bar{y}}, \right. \right.$$

$$- \frac{1}{720} \overline{\bar{x}\bar{x}\bar{x}\bar{y}y} + \frac{1}{240} \overline{\bar{x}\bar{x}\bar{y}y\bar{y}} + \frac{1}{240} \overline{\bar{x}\bar{y}\bar{x}\bar{y}y} + \frac{1}{720} \overline{\bar{x}\bar{x}\bar{y}\bar{x}\bar{y}} -$$

$$\frac{\overline{\bar{x}\bar{y}y\bar{y}y}}{1440}, \frac{\overline{\bar{x}\bar{x}\bar{x}\bar{x}\bar{y}}}{5040} - \frac{\overline{\bar{x}\bar{x}\bar{x}\bar{y}y}}{1344} + \frac{13 \overline{\bar{x}\bar{x}\bar{x}\bar{y}y\bar{y}}}{15120} + \frac{1}{840} \overline{\bar{x}\bar{x}\bar{y}\bar{x}\bar{y}y} +$$

$$\left. \frac{\overline{\bar{x}\bar{x}\bar{x}\bar{y}\bar{x}\bar{y}}}{3360} + \frac{\overline{\bar{x}\bar{x}\bar{y}y\bar{y}y}}{6720} + \frac{\overline{\bar{x}\bar{y}\bar{x}\bar{y}y\bar{y}}}{1260} + \frac{\overline{\bar{x}\bar{x}\bar{y}y\bar{x}\bar{y}}}{1680} - \frac{\overline{\bar{x}\bar{y}y\bar{y}y\bar{y}}}{10080}, \dots \right],$$

$$\bar{y} \rightarrow \text{LS} \left[0, \frac{\bar{x}\bar{y}}{12}, \frac{1}{24} \overline{\bar{x}\bar{y}y}, -\frac{1}{360} \overline{\bar{x}\bar{x}\bar{x}\bar{y}} + \frac{1}{120} \overline{\bar{x}\bar{x}\bar{y}y} + \frac{1}{180} \overline{\bar{x}\bar{y}y\bar{y}}, \right.$$

$$- \frac{1}{720} \overline{\bar{x}\bar{x}\bar{x}\bar{y}y} + \frac{1}{240} \overline{\bar{x}\bar{x}\bar{y}y\bar{y}} + \frac{1}{240} \overline{\bar{x}\bar{y}\bar{x}\bar{y}y} + \frac{1}{720} \overline{\bar{x}\bar{x}\bar{y}\bar{x}\bar{y}} -$$

$$\frac{\overline{\bar{x}\bar{y}y\bar{y}y}}{1440}, \frac{\overline{\bar{x}\bar{x}\bar{x}\bar{x}\bar{y}}}{10080} - \frac{\overline{\bar{x}\bar{x}\bar{x}\bar{y}y}}{2016} + \frac{\overline{\bar{x}\bar{x}\bar{x}\bar{y}y\bar{y}}}{1890} + \frac{\overline{\bar{x}\bar{x}\bar{y}\bar{x}\bar{y}y}}{1120} + \frac{\overline{\bar{x}\bar{x}\bar{x}\bar{y}\bar{x}\bar{y}}}{5040} +$$

$$\left. \frac{\overline{\bar{x}\bar{x}\bar{y}y\bar{y}y}}{2520} + \frac{1}{840} \overline{\bar{x}\bar{y}\bar{x}\bar{y}y\bar{y}} + \frac{\overline{\bar{x}\bar{x}\bar{y}y\bar{x}\bar{y}}}{1260} - \frac{\overline{\bar{x}\bar{y}y\bar{y}y\bar{y}}}{5040}, \dots \right] \Bigg\rangle$$