

In[68]:= **Table**[FullSimplify[SeriesCoefficient[brad10, k]], {k, 1, 10}]

Out[68]= $\left\{ u v, \frac{1}{2} (-1 + u^2) (-1 + v^2), \frac{1}{6} u (-3 + u^2) v (-3 + v^2), \frac{1}{24} (3 - 6 u^2 + u^4) (3 - 6 v^2 + v^4), \right.$
 $\frac{1}{120} u (15 - 10 u^2 + u^4) v (15 - 10 v^2 + v^4), \frac{1}{720} (-15 + 45 u^2 - 15 u^4 + u^6) (-15 + 45 v^2 - 15 v^4 + v^6),$
 $\frac{u (-105 + 105 u^2 - 21 u^4 + u^6) v (-105 + 105 v^2 - 21 v^4 + v^6)}{5040},$
 $\frac{(105 - 420 u^2 + 210 u^4 - 28 u^6 + u^8) (105 - 420 v^2 + 210 v^4 - 28 v^6 + v^8)}{40320},$
 $\frac{u (945 - 1260 u^2 + 378 u^4 - 36 u^6 + u^8) v (945 - 1260 v^2 + 378 v^4 - 36 v^6 + v^8)}{362880}, \frac{1}{3628800}$
 $\left. \left((-945 + 4725 u^2 - 3150 u^4 + 630 u^6 - 45 u^8 + u^{10}) (-945 + 4725 v^2 - 3150 v^4 + 630 v^6 - 45 v^8 + v^{10}) \right) \right\}$

In[69]:= **TableForm**[%]

Out[69]//TableForm=

u v
 $\frac{1}{2} (-1 + u^2) (-1 + v^2)$
 $\frac{1}{6} u (-3 + u^2) v (-3 + v^2)$
 $\frac{1}{24} (3 - 6 u^2 + u^4) (3 - 6 v^2 + v^4)$
 $\frac{1}{120} u (15 - 10 u^2 + u^4) v (15 - 10 v^2 + v^4)$
 $\frac{1}{720} (-15 + 45 u^2 - 15 u^4 + u^6) (-15 + 45 v^2 - 15 v^4 + v^6)$
 $\frac{u (-105 + 105 u^2 - 21 u^4 + u^6) v (-105 + 105 v^2 - 21 v^4 + v^6)}{5040}$
 $\frac{(105 - 420 u^2 + 210 u^4 - 28 u^6 + u^8) (105 - 420 v^2 + 210 v^4 - 28 v^6 + v^8)}{40320}$
 $\frac{u (945 - 1260 u^2 + 378 u^4 - 36 u^6 + u^8) v (945 - 1260 v^2 + 378 v^4 - 36 v^6 + v^8)}{362880}$
 $\frac{(-945 + 4725 u^2 - 3150 u^4 + 630 u^6 - 45 u^8 + u^{10}) (-945 + 4725 v^2 - 3150 v^4 + 630 v^6 - 45 v^8 + v^{10})}{3628800}$