$$x|y+u|v=\frac{xv+yu}{a\,(1+xyuv)}\Big|\frac{yv-xu}{a\,(1-xyuv)}$$

$$az=\frac{xv+yu}{1+xyuv}:\quad aw=\frac{yv-xu}{1-xyuv}$$

$$f\left(\frac{xv+yu}{1+xyuv}\right)+\frac{yv-xu}{1-xyuv}g\left(\frac{xv+yu}{1+xyuv}\right)$$

$$\frac{xv+yu}{1+xyuv}=\frac{yu\overbrace{1-{}^{u}\varphi x^2}+xv\overbrace{1-{}^{x}\varphi u^2}}{1-{}^{x}\varphi^{u}\varphi x^2u^2}$$

$$\frac{yv-xu}{1-xyuv}=\frac{yv\overbrace{1-x^2u^2}-xu\overbrace{1-{}^{x}\varphi^{u}\varphi}}{1-{}^{x}\varphi^{u}\varphi x^2u^2}$$

$$\underbrace{xv+yu}\underbrace{1-{}^{x}\varphi^{u}\varphi x^2u^2}=\underbrace{yu\overbrace{1-{}^{u}\varphi x^2}+xv\overbrace{1-{}^{x}\varphi u^2}}\underbrace{1+xyuv}$$

$$\underbrace{yv-xu}\underbrace{1-{}^{x}\varphi^{u}\varphi x^2u^2}=\underbrace{yv\overbrace{1-x^2u^2}-xu\overbrace{1-{}^{x}\varphi^{u}\varphi}}\underbrace{1-xyuv}$$

$$\overbrace{1-{}^{x}\varphi^{u}\varphi x^2u^2}^{2m}\left(\frac{xv+yu}{1+xyuv}\right)^{2\not{m}}=\sum_{i+j}^{m}{}^{x}\overset{i}{\varphi}\,{}^{u}\overset{j}{\varphi}\,\overbrace{u\underbrace{1-{}^{u}\varphi x^2}}^{2\not{i}}\,\overbrace{x\underbrace{1-{}^{x}\varphi u^2}}^{2\not{j}}+yv\sum_{i+j}^{m-1}{}^{x}\overset{i}{\varphi}\,{}^{u}\overset{j}{\varphi}\,\overbrace{u\underbrace{1-{}^{u}\varphi x^2}}^{2\not{i}+1}\,\overbrace{x\underbrace{1-{}^{x}\varphi u^2}}^{2\not{j}+1}$$

$$\overbrace{1-{}^{x}\varphi^{u}\varphi x^2u^2}^{2m+1}\left(\frac{xv+yu}{1+xyuv}\right)^{2\not{m}+1}=y\sum_{i+j}^{m}{}^{x}\overset{i}{\varphi}\,{}^{u}\overset{j}{\varphi}\,\overbrace{u\underbrace{1-{}^{u}\varphi x^2}}^{2\not{i}+1}\,\overbrace{x\underbrace{1-{}^{x}\varphi u^2}}^{2\not{j}}+v\sum_{i+j}^{m}{}^{x}\overset{i}{\varphi}\,{}^{u}\overset{j}{\varphi}\,\overbrace{u\underbrace{1-{}^{u}\varphi x^2}}^{2\not{i}}\,\overbrace{x\underbrace{1-{}^{x}\varphi u^2}}^{2\not{j}+1}$$

$$\text{LHS}\;=\;\overbrace{yu\underbrace{1-{}^{u}\varphi x^2}+xv\underbrace{1-{}^{x}\varphi u^2}}^{2\not{m}}\;=\;\text{RHS}$$

$$\text{LHS}\;=\;\overbrace{yu\underbrace{1-{}^{u}\varphi x^2}+xv\underbrace{1-{}^{x}\varphi u^2}}^{(2\not{m}+1)}\;=\;\text{RHS}$$

$$\overbrace{1-{}^{x}\varphi^{u}\varphi x^2u^2}^{2m+1}\ \frac{yv-xu}{1-xyuv}\left(\frac{xv+yu}{1+xyuv}\right)^{2\cancel{m}}$$

$$=\left(\underbrace{1-x^2u^2}\sum_{i+j}^{m-1}{}^{x}i\overset{+1}{\varphi}{}^{u}j\overset{+1}{\varphi}\overbrace{u\underbrace{1-{}^{u}\varphi x^2}}^{2\cancel{i}+1}\overbrace{x\underbrace{1-{}^{x}\varphi u^2}}^{2\cancel{j}+1}-xu\underbrace{1-{}^{x}\varphi^{u}\varphi}\sum_{i+j}^{m}{}^{x}\overset{i}{\varphi}{}^{u}\overset{j}{\varphi}\overbrace{u\underbrace{1-{}^{u}\varphi x^2}}^{2\cancel{i}}\overbrace{x\underbrace{1-{}^{x}\varphi u^2}}^{2\cancel{j}}\right)$$

$$+yv\left(\underbrace{1-x^2u^2}\sum_{i+j}^{m}{}^{x}\overset{i}{\varphi}{}^{u}\overset{j}{\varphi}\overbrace{u\underbrace{1-{}^{u}\varphi x^2}}^{2i}\overbrace{x\underbrace{1-{}^{x}\varphi u^2}}^{2j}-xu\underbrace{1-{}^{x}\varphi^{u}\varphi}\sum_{i+j}^{m-1}{}^{x}\overset{i}{\varphi}{}^{u}\overset{j}{\varphi}\overbrace{u\underbrace{1-{}^{u}\varphi x^2}}^{2\cancel{i}+1}\overbrace{x\underbrace{1-{}^{x}\varphi u^2}}^{2\cancel{j}+1}\right)$$

$$\overbrace{1-{}^{x}\varphi^{u}\varphi x^2u^2}^{2m+2}\ \frac{yv-xu}{1-xyuv}\left(\frac{xv+yu}{1+xyuv}\right)^{2\cancel{m}+1}$$

$$=y\left(\underbrace{1-x^2u^2}\sum_{i+j}^{m}{}^{x}\overset{i}{\varphi}{}^{u}j\overset{+1}{\varphi}\overbrace{u\underbrace{1-{}^{u}\varphi x^2}}^{2\cancel{i}}\overbrace{x\underbrace{1-{}^{x}\varphi u^2}}^{2\cancel{j}+1}-xu\underbrace{1-{}^{x}\varphi^{u}\varphi}\sum_{i+j}^{m}{}^{x}\overset{i}{\varphi}{}^{u}\overset{j}{\varphi}\overbrace{u\underbrace{1-{}^{u}\varphi x^2}}^{2\cancel{i}+1}\overbrace{x\underbrace{1-{}^{x}\varphi u^2}}^{2\cancel{j}}\right)$$

$$+v\left(\underbrace{1-x^2u^2}\sum_{i+j}^{m}{}^{x}i\overset{+1}{\varphi}{}^{u}\overset{j}{\varphi}\overbrace{u\underbrace{1-{}^{u}\varphi x^2}}^{2\cancel{i}+1}\overbrace{x\underbrace{1-{}^{x}\varphi u^2}}^{2\cancel{j}}-xu\underbrace{1-{}^{x}\varphi^{u}\varphi}\sum_{i+j}^{m}{}^{x}\overset{i}{\varphi}{}^{u}\overset{j}{\varphi}\overbrace{u\underbrace{1-{}^{u}\varphi x^2}}^{2\cancel{i}}\overbrace{x\underbrace{1-{}^{x}\varphi u^2}}^{2\cancel{j}+1}\right)$$

$$\text{LHS}\ =\overbrace{yv\underbrace{1-x^2u^2}-xu\underbrace{1-{}^{x}\varphi^{u}\varphi}}$$

$$\left(\sum_{i+j}^{m}{}^{x}\overset{i}{\varphi}{}^{u}\overset{j}{\varphi}\overbrace{u\underbrace{1-{}^{u}\varphi x^2}}^{2\cancel{i}}\overbrace{x\underbrace{1-{}^{x}\varphi u^2}}^{2\cancel{j}}+yv\sum_{i+j}^{m-1}{}^{x}\overset{i}{\varphi}{}^{u}\overset{j}{\varphi}\overbrace{u\underbrace{1-{}^{u}\varphi x^2}}^{2\cancel{i}+1}\overbrace{x\underbrace{1-{}^{x}\varphi u^2}}^{2\cancel{j}+1}\right)=\ \text{RHS}$$

$$\text{LHS}\ =\overbrace{yv\underbrace{1-x^2u^2}-xu\underbrace{1-{}^{x}\varphi^{u}\varphi}}$$

$$\left(y\sum_{i+j}^{m}{}^{x}\overset{i}{\varphi}{}^{u}\overset{j}{\varphi}\overbrace{u\underbrace{1-{}^{u}\varphi x^2}}^{2\cancel{i}+1}\overbrace{x\underbrace{1-{}^{x}\varphi u^2}}^{2\cancel{j}}+v\sum_{i+j}^{m}{}^{x}\overset{i}{\varphi}{}^{u}\overset{j}{\varphi}\overbrace{u\underbrace{1-{}^{u}\varphi x^2}}^{2\cancel{i}}\overbrace{x\underbrace{1-{}^{x}\varphi u^2}}^{2\cancel{j}+1}\right)=\ \text{RHS}$$