3.94

$T_2 \cdot 26 = T_4$

$\binom{n}{1} \cdot 26 = \binom{n}{3} \rightarrow n \cdot 26 = \frac{n(n-1)(n-2)}{6}$

~~$n=0$~~, $n=14$ ~~$n=-11$~~

$T_{k+1} = \binom{14}{k} y^{-\frac{2}{3}(14-k)} \left(-y^{\frac{1}{4}} x^{-\frac{3}{8}}\right)^k$

$y^{-2}: \quad -2 = -\frac{2}{3}(14-k) + \frac{1}{4}k \quad /\cdot 3$

$22 = 2\frac{3}{4}k \rightarrow \boxed{k=8}$

$T_9 = \binom{14}{8} y^{-2} x^3$