\[
\frac{1}{\sqrt{y_0}} = 1.65 \\
\therefore f_3 = 1.5 \quad \text{for } f = 1.65 \\
\frac{3}{15} = \frac{5}{m_y} \\
\frac{3}{15} = \frac{5}{m_y}
\]
To be linear

- Transconductors don't have
  Input: Binary data
  Using transconductors

- Weighted summation

- Open loop circuits

- At high frequencies difficult

- Feed back circuits - difficult

\[
\text{\( g_{m1} V_1 + g_{m2} V_2 + g_{m3} V_3 \)}
\]
Current drive preferable

\[ V = \frac{V}{2} \text{ Transmitted Voltage (differential)} \]

\[ I = \frac{V}{2} \]

\[ V = \text{Voltage} \]

\[ I = \text{Current} \]

\[ R = \text{Resistor} \]

\[ T = \text{Transformer} \]

\[ A = \text{Amplifier} \]
mode
limiting
operated in
diff pair

\[
V_{cm} = \sqrt{2} \left( \frac{1}{L_1} \right) R/2
\]
set by tear currents

* Tap weights are
  for each tap
* Differential pairs
  delay the signal
* Chain of FP's to
  linear equalizer