

Quiz

1 page only (front/back), Name written

① Write the Pot Aquifer Material Balance Eq.

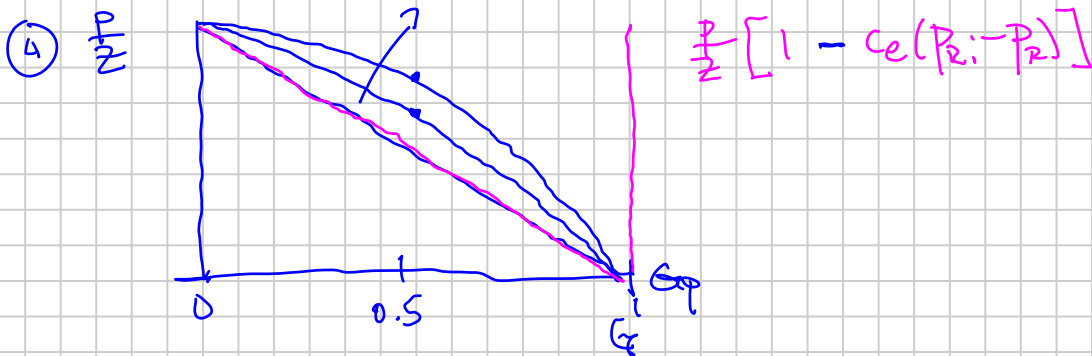
$$\frac{P_R}{Z} \left[ 1 - c_e (P_{Ri} - P_R) \right] = \left( 1 - \frac{G_P}{G} \right) \left( \frac{P_{Ri}}{Z_i} \right)$$

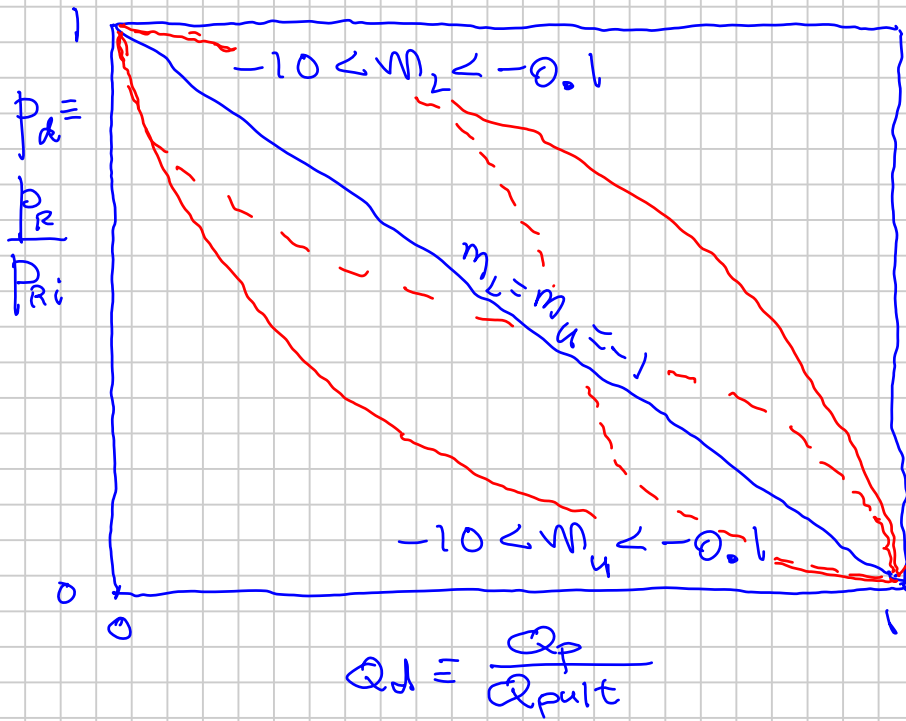
② Define the parameters needed to calculate  $c_e$  (?)  $M$  (?)  $C_e: M, c_w, C_f \mid M: V_w$

③ What are the basic assumptions (list 2-3) of the Pot Aquifer model?  $[P_w \approx P_g] \leftarrow$

④ Draw  $p/Z$  vs  $G_P$  for straight-line material balance & for M.B w/ Pot Ag. (a) small water volume (b) large water volume

⑤ When is the  $c_z(p)$  important? lower  $\phi$ 's





Find a general relation  $p_d(Q_d)$  with following constraints:

$$p_d(0) = 1, \quad p_d(1) = 0$$

$$\left. \frac{dp_d}{dQ_d} \right|_{Q_d=0} = m_2$$

$$\left. \frac{dp_d}{dQ_d} \right|_{Q_d=1} = m_u$$