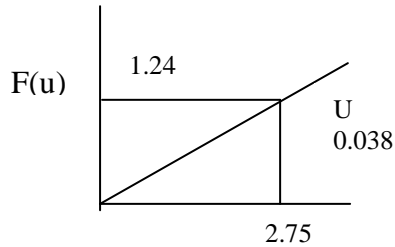


### 4.4.4 Chow Method

$$F(u) = \frac{S}{\Delta S} = \frac{0.47}{0.38} = 1.24 \rightarrow W(u) = 2.75$$

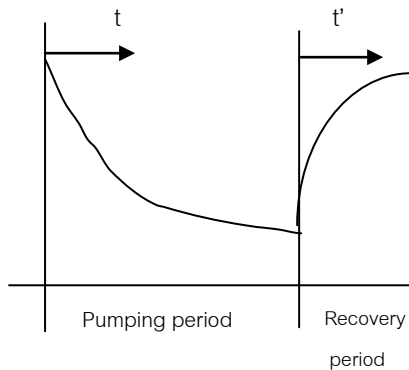
$$u = 0.038$$



$$T \Rightarrow S = \frac{Q}{4\pi T} W(u) \Rightarrow T = \frac{Q}{4\pi S} W(u)$$

$$S \Rightarrow \frac{r^2}{t} \left( \frac{4T}{S} \right) u \Rightarrow S = \frac{4Ttu}{r^2}$$

### 4.4.5 Recovery Test : residual draw downs



$$S' = \frac{Q}{4\pi T} [W(u) - W(u')]$$

$$\text{where } u = \frac{r^2 S}{4Tt}, u' = \frac{r^2 S'}{4Tt'}$$

$$S' = \frac{2.30Q}{4\pi t} \log \frac{t}{t'}$$

$$T = \frac{2.30Q}{4\pi \Delta S'} \dots \dots \dots *$$

### Sample 4.4.6

