

الف) $f(u) = \sqrt{\log \frac{u-1}{u}} \Rightarrow u > 0 \quad u \neq 1$
 $\frac{u-1}{u} > 0 \Rightarrow \frac{u-1}{u} > 1 \Rightarrow u > \frac{1}{2}$

$\log \frac{u-1}{u} > 0 \Rightarrow \frac{u-1}{u} > 1 \Rightarrow u > \frac{1}{2}$
 $\log \frac{u-1}{u} > 0 \Rightarrow \frac{u-1}{u} < 1 \Rightarrow u < \frac{1}{2}$

$\Rightarrow \frac{1}{4 + \sqrt{u} - u} > 0 \Rightarrow 4 + \sqrt{u} - u > 0 \Rightarrow -\frac{1}{4} + \frac{1}{4} + \frac{1}{4} > 0$

از اینجا
 که در اینجا
 به حساب می آید
 دارد $c = 0$
 در اینجا

$\Rightarrow \sqrt{\frac{u+1}{u+b}} + a \Rightarrow \frac{u+1+a+ab}{u+b} \Rightarrow \frac{4}{u+b} > 0$
 $(u+a)k + 1+ab \Rightarrow a = -c \Rightarrow \frac{4}{u+b} > 0$
 $u = -1 \Rightarrow u+b = 0 \Rightarrow b = -1$

$0 < t < c \Rightarrow a < \sqrt{u} < c$
 $0 < u < \frac{1}{c} \Rightarrow \frac{1}{c} < u < 1$

$y = \sqrt{u-1-u+1} \Rightarrow \sqrt{u} \Rightarrow u > 0$
 $f(u) = \sqrt{u}$
 $u > 0$
 $u > 0$
 $u > 0$

$y = \sqrt{u+1-u+1} \Rightarrow y = \sqrt{u+2}$
 $f(u) = \sqrt{u+2}$
 $u > -2$
 $u > -2$
 $u > -2$

$\frac{r(1u^2 + 1u^2 + 4u + 1)}{(u+1)^2} \Rightarrow \frac{r(u+1)^2}{(u+1)^2} \Rightarrow \frac{r}{u+1}$

$D = R - \frac{1}{r}$

$y = \sqrt{1 - \log(u-a)} \Rightarrow u-a > 0 \Rightarrow u > a$

$1 - \log(u-a) > 0 \Rightarrow \log(u-a) < 1 \Rightarrow u-a < 10 \Rightarrow u < 10+a$
 $\frac{a}{r} < u < \frac{10+a}{r} \Rightarrow c-b = \frac{10+a}{r} - \frac{a}{r} = \frac{10}{r} = 0$