]Vtcpuncvkqp_

Oc{ 33. 4237

Vq yjqo kv oc{ eqpegtp<

 $Pcog\,qh\,vjg\,Eqo\,rcp\{<\quad P\,J\ /$

tguwnvu. vjg cpcn{ugu qh vjg hcevqtu vjgtgqh. gve0 cpf rtqxkfgf kphqtocvkqp vq cmqy vjg eqookvvgg vq gxcnwcvg cp{ rtqrqucn hqt vjg rwtejcug qh vjg ujctgu qh vjg Eqorcp{. cuuwokpi vjcv kv ku ocfg. htqo vjg kpfgrgpfgpv uvcpfrqkpv ykvj pq xguvgf kpvgtguv kp vjg Eqorcp{ cpf ikxg tgeqoogpfcvkqpu rtqorvn{ cpf cfgswcvgn{ vq vjg /

 $\begin{array}{l} Gpjcpegf \ "Ocpcigogpv \ hqt \ Pq0 \ 3 \ Swcnkv \{ "\ vq\ rtqoqvg \ itqyvj \ uvtcvgi \ \{ \end{array}$

Gpjcpeg vjg swcnkvkgu qh "iqqfu".

5) Ocpcigogpv uvtcvgikgu

 $\label{thm:condition} \mbox{Kp ceeqtfcpeg y kvj kvu ocpcigogpv rqnke} \{.\ \mbox{vjg Eqorcp} \{\ y \mbox{km korngogpv ogcuwtgu dcugf qp vjg hqmq y kpi hqwt ocpcigogpv uvtcvgikgu<}$

jcxg dggp guvcdnkujgf vq fgnkdgtcvg qp vjg rqnkekgu cpf ogcuwtgu qh vjg yjqng I tqwr. yjgtgd{ uvtgpivjgpkpi uwej oqpkvqtkpi hwpevkqpu0

50 Rqnke { qh rtqhkv cnnqecvkqpu vq ujctgjqnfgtu

Vjg Eqorcp{ tgictfu rtqhkv cnnqecvkqpu vq kvu ujctgjqnfgtu cu qpg qh vjg korqtvcpv ocpcigogpv kuuwgu. cpf jcu c dcuke rqnke{ qh fkuvtkdwvkpi rtqhkvu vq kvu ujctgjqnfgtu kp ceeqtfcpeg ykvj cu eqtfcpe{ g p 2 {" pu t th. O vq D e. e o4 rcp{ to o5 rcp{

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Eqorc

- Nctig Rwtejcug Cevkqp. Nctig Rwtejcugt cpf Nctig Rwtejcug Rtqrqucn wpfgt vjg McpfMtitBpRwt cug Ce w s t vj
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 $qh\ Fktgevqtu\ qh\ vjg\ Eqorcp\{0\ V$

qrvkqp (vjg "Uvqem Ceswkukvkqp Tkijvu")0 Tghgtgpeg ku ocfg vq Cvvcejogpv KX hqt vjg uw o oct{ qh vjg kuuwcpeg qh vjg Uvqem Ceswkukvkqp Tkijvu cu c fghgpug ogcuwtg0
Kp vjg gxgpv vjcv vjg Eqtrqtcvg k g g

70 Tgcuqpcdngpguu qh vjg Rncp

(3) Eqpukuvgpe{ ykvj I wkfgnkpgu Tgictfkpi Vcmgqxgt Fghgpug Ogcuwtg

Cu fguetkdgf dgnqy. vjg Rncp ucvkuhkgu cnn qh vjg vjtgg rtkpekrngu rtqxkfgf kp vjg "Iwkfgnkpgu Tgictfkpi Vcmgqxgt Fghgpug hqt vjg Rwtrqugu qh Rtqvgevkqp cpf Gpjcpegogpv qh Eqtrqtcvg Xcnwg cpf Ujctgjqnfgtu' Eqooqp Kpvgtguvu" tgngcugf d{ vjg

(6)	Tgurgevkpi	Qrkpkqp qh	Eqtrqtcvg	Xcnwg C	Зрјсреg o	gpv Eqo	okwgg Eg	orqugf

cp{ fgekukqp vjcv vjg fghgpug ogcuwtg cickpuv vjg Nctig Rwtejcug Cevkqp gpicigf kp vjg Eqorcp{'u ujctgu jcu pqv dggp vtkiigtgf. vjg Rncp gpuwtgu c u{uvgo wpfgt yjkej vjg Eqorcp{'u Dqctf qh Fktgevqtu ykm pqv ctdkvtctkn{ ocmg uwej c fgekukqp0

(8) Pqv Fgcf Jcpf $V\{rg \ qt \ Unqy \ Jcpf \ V\{rg \ Vcmgqxgt \ Fghgpug \ Ogcu$

vq vjg ujctgjqnfgtu yjq jcxg dggp tgeqtfgf kp vjg ncuv ujctgjqnfgtu' tgikuvgt qp vjg tgeqtf fcvg hqt cmqv o gpv0

 $\label{thm:convergence} Cvvcej\ o\ gpv\ \texttt{K} \\ Cevkxkvkgu\ qh\ vjg\ Eqtrqtcvg\ Xcnwg\ Gxcnwcvkqp\ Eq\ o\ o\ kvvgg\ cpf\ vjg\ Rtqhkngu\ qh\ kvu\ Og\ o\ dgtu$

- Cevkxkvkgu qh vjg Eqtrqtcvg Xcnwg Gxcnwcvkqp Eq o o kvvgg
- C \$ q%3¿ ° WR0 0 WÀ W

Cevkxkvkgu 1 Fcvg qh o ggvkp i	Cwgpfgg	Cigpfc	
	-	ecredknkvkgu cpf uqeken cevkqp rtqitcou)	

 $kpvgtguv\ qh\ vjg\ ujctgjqnfgtu\ htq\ o\ vjg\ kpfgrgpfgpv\ uvcpfrqkpv\ ykvj\ pq\ xguvgf\ kpvgtguv\ kp\ vjg$

,	Mc wocuc Qvuwmc ku c ecpfkfcvg hqt uwduvkvwvg Qwvukfg Ogodgt qh vjg Uwrgtxkuqt{ Dqctf vq dg rtqrqugf hqt jku gngevkqp vq vjg 92vj qtfkpct{ igpgt	Cwfkv	&

Cvvcej ogpv"KX Uw o oct {"qh"Uvqem"Ceswkukvkqp"Tki j vu

30 Ujctgjqnfgtu" vq" dg"

 $^*6 + \qquad Eqpf \\ \text{kvkqp"hqt"vjg"gzgtekug"qh"vjg"Uvqem"} \qquad \qquad p \qquad \text{vkqp"} \qquad \qquad \text{k} \quad \text{jvr} \\$

 $*kpenw\,f\,kp\,i\,."\,\,dwv"\,\,pqv"\,\,nk\,o\,kvg\,f"\,\,vq."\,\,f\,kuvtkdwvkqp"\,\,qh"\,\,uwt\,r\,nwu="\,\,v\,j\,g"\,\,uc\,o\,g"$

*6+

- o cvvgtu" tgncvgf" vq" vjg" rwtrqug qh" vjg" Nctig" Rwtejcugt" ceswktkpi" ujctgu" qh" vjg" Eq o rcp{=
- *5+ Vjg"ocvvgtu"tgncvgf"vq"vjg"kpvgpvkqp"qh"vjg"Nctig"Rwtejcugt"kp"ceswktkpi"ujctgu"qh" vjg Eqorcp{"vjtqwij"c"vgpfgt"qhhgt"dkf"cpf"vjg"ocvvgtu"tgncvgf"vq"vjg"Nctig"Rwtejcugt)u ceswkukvkqp"rncp"qh"ujctgu"qh"vjg"Eqorcp{"*kpenwfkpi."dwv"pqv"nkokvgf"vq."ngicn"kuuwtkp eswkukv *kp_dwv euk kqp"rncp" h" *

 $qdnkicvkqpu"ejctigf"jcxg"pqvjkpi"vq"fq"ykvj"vjg"gzgewvkqp"qh"vjg"rqygtu"qh"vjg"Eqtrqtcvg"\\Xcnwg"$

*Hqt"tghgtgpeg+

$\label{lem:condition} $\texttt{Etkvgtkc''} + qt''vjg''Kpfgrgpfgpeg''qh''Qwvukfg''Qhhkegtu$$

 $Vjg"\,qwvukfg"\,qhhkegt"\,qt"\,ecpfkfcvg"\,hqt"\,qwvukfg"\,qhhkegt"$

 $*Pqvgu+ 30 \quad $Ko \ rqtvcpv" \ go \ rnq{gg$" o gcpu" cp" go \ rnq{gg" cuuk i pg f" vq" vj g" \ rquv" qh" c" i gpgtcn" o cpc i gt" qt" c" and constant of the constant of the$