! "#\$%&' ' \$! "#()#*\$ +#' , #\$-' .&* / ()0&' \$1 (23#)\$4+5-516\$! "#\$%&#' X1'\$77'/O11';&%3'';6'%. &5&'1&&#;'%O': &';''\$8&'D05'\$%7&\$;%'+';&\$%;'O1'%. &'D7OO5'5&;&5L&#'D05'74<4%&#'<0: 474%J'\$1#' 80<''\$1401';&\$%;6'41'80<''74\$18&'A4%. '%. &'=<&548\$1;'A4%. 'E4;\$: 474%&;'=8%T=E=\\frac{\text{WF}}{\text{F}}''

__%. &5'; ''\$8&'#&%\$47;\$'

- X1'\$##4%01'%0'%. &'b5&&1'900<6'%. &'/011'2%3#40'-. &\$%&5';. \$5&;'\$'70:: J'A4%. '%. &'90:;. \$<'H\$41'2%\$?&F'-. &'9-=>'/0C' DD48&'4;'\$7;0'708\$%&#'41'%. &'70:: JF''

- =77'&L&1%; '41'%. &'90: ; . \$<'-. &\$%&5'=5%; '>&1%&5'\$5&'\$#<414; %&5&#': J'9-=>'H\$1\$?&<&1%'41873#41?'%. &'
 "50L4; 401'0D'; %\$DDF''-. &'; 4m&'OD'%. &'; %\$DD'1&&#&##'DO5'\$1'&L&1%'4; '#&%&5<41&#'; O7&7J': J'%. &'9-=>'H\$1\$?&<&1%''
- b503";'. 0; %17'\$1'&L&1%'41'%. &'90:;.\$<'-.&\$\%5'=5\%;'>&1\%5'8\$1'\"50L4#&'\%. &45'OA1'L0731\%&5'\&L&1\%';\\\$DDb' . OA&L&56'\%. &J'<3;\%': &'=\V\$'\"50L\&#': J'\%. &'9-=>'H\\$1\\$?\&<&1\%'\\$1\#'/\V\\$5\&'O17J'\\$770A\&#'\\$;'\\$';3'\\"7\&<\&1\%\O' \%. &'\%5\\$41\&#'\D501\%'OD'. O3;\&'\\$1\#'\\&8. 148\\$7';\\\$DD'\\"50L4\#\&\#': J'90:;.\$<'-.\&\\$\\\$5\\$'-.\&\\$\\\$5\\$'\\$5\\$'\>&1\\&5\\$F'
- K . 47&'%. &'; \$D&%J'OD'%. &''' \$%501; '\$1#''' &5DO5 < &5; '41'O35'L&13&; '\$5&'9-=>@, '%0'''' 54O54%J6'41#4L4#3\$7;)?5O3''; '
 "&5DO5 < 41?'O5'5&. &\$5; 41?'\$%'\$1J'OD'%. &'9-=>'; ''\$8&; '#0'; O'\$%%. &45'OA1'54; BF''
- G\$;%'<413%\dagger: OOB41?;\$'9-=>'8\$1\\delta'?3\$5\$1\\&\dagger:\begin{align*} \$880<<0\#\$\\MO1'OD'5&I3&;\\; 'DO5';''\$8&'41'\\. &'9-=>'L&13&; 'A4\\. 41' \\ *'A&\text{B};'OD'\\. &'''50''O;\text{&#}\text{&L&1}\\\#\$\\\&F''
- H\$105'&L&1%; '74B&'8018&5%; 6'%\$7&1%'; . OA; '05'#\$18&''' &5D05< \$18&; '%&1#'%0'5&I 345&' < 05&'%&8 . 148\$7'; 3''''05%'\$;'
 A&77'\$; '\$##4%01\$7'; &%3''''%< &F''-. &J' < \$J'\$7; 0'5&I 345&'%. &'\$##4%01'0D'03%; 4#&'; &8354%J'05'%&8 . 148\$7'; 3''''05%'41'
 \$##4%01'%0'5&1%\$7'0D'\$##4%01\$7'850A#'801%507'#&L48&; 'T; 38 . '\$;' < &%\$7'#&%&8%05; '\$1#': \$554&5; \(\mathbb{W}\)F'\\X1'%. &; &'8\$; &; 6'
 \$'<&&M. 1(&)0. 1(.)--0. 3(1)6B; 4()-0. 3(5-0. 3(1))0. 4(5)3(1)4#-0. 1(L)-0. 4(4)TF(\(\mathbb{H}\)T\\\F'\\X1\)*.

;): \$%. 500<;); . 0A&5; '\$5&'5&; %548%&#'%0'<\$7&; '\$1#'%. &'D&<\$7&'8. \$1?41?'\$5&\$;): \$%. 500<;); . 0A&5; '\$5&'5&; %548%&#'%0'<\$7&; F''

R&&; \$('; \$P*0' 3\$1&002D?''

O#')(C-)#/<1&C02D?\$

- (F -. &5&'4; '10'#&805\$%1?'%. &'90: ; . \$<'-. &\$\%5'=5\%; '>&1\%5'70: : JF'\XD'\$'?503'''A037#'74B&'\$1'&C8&''\%01'<\$#&'\%0'\$1J'OD'%. &; &'537&; 6'%. &J'<3; %'; &835&'T41'A54\%1?\W'\$1'\$''''50L\$7'#45&8\%J'D5O<'\%. &'E45&8\%05'OD'9-=>6'B4\%5F: J51\&; \M: 8F\$'\$\%7\&\$; \%, 'A\&\&B; '41'\$#L\$18\&'OD'\%. &'\&L\&1\%F''
- NF i O'7\$%&C': \$77001;6'801D&%4'05';%5&\$<&5'8\$1101;'\$5&'\$770A&#'\$%'\$1J'%4<&F'HJ7\$5': \$77001;'8\$1': &'3;'3''01' %. &'801D45<\$%01'%. \$%'%. &': \$77001;'A&5&'10%'<\$#&'41';\$<&'D\$8%05J'\$;'7\$%&C': \$77001;'T\$;'850;;'801%\$<41\$%01' 8037#'08835\F'
- , F K7&\$; &'5&D5\$41'D5O<'3; 41?'\$1J'\$#. &; 4L&'%\$''&6'''3; . ''41;6'O5'O%. &5'#\$<\$?41?'<\$%&54\$7; 'O1'%. &'A\$π;F'-. &'3; &'OD'\$#. &; 4L&'<\$%&54\$7'%. \$%'<\$J'#\$<\$?&'; 35D\$8&; '4;'''5O. 4: 4%#'T#38%%\$''&6'%\$8B;6'1\$47;6'''\$41%'&%8F\\"'\\D'JO3'5&I 345&'''05\\\$: 7&'A4''&': O\$5#;6'''4''&'\$1#'#5\$''&'05'\&\$; &7;6'''7&\$; &'; &835&'%. &<'%. 503?. ']L&1%'H\$1\$?&<&1\\"'''
- +F E&805\$\(\mathbb{M}\)O1;'<\$J'10\(\mathbb{O}\):;\(\mathbb{S}\)38\(\mathbb{M}\)MO5;\(\mathbb{G}\).\(\mathbb{S}\)7A\$\(\mathbb{S}\)3\(\mathbb{S}\);\(\mathbb{S}\)458\(\mathbb{S}\);\(\mathbb{S}\)5\(\mathbb{D}\)5\(\mathbb{S}\)4\(\mathbb{S}\)6';\(\mathbb{S}\)458\(\mathbb{S}\);\(\mathbb{S}\)10\(\mathbb{S}\)6';\(\mathbb{S}\)458\(\mathbb{S}\);\(\mathbb{S}\)10\(\mathbb{S}\)6';\(\mathbb{S}\)458\(\mathbb{S}\)5\(\mathbb{S}\)7\(\mathbb{S}\)6';\(\mathbb{S}\)458\(\mathbb{S}\)5\(\mathbb{S}\)7\(\mathbb{S}\)6';\(\mathbb{S}\)458\(\mathbb{S}\)5\(\mathbb{S}\)7\(\mathbb{S}\)7\(\mathbb{S}\)6';\(\mathbb{S}\)458\(\mathbb{S}\)7\(\mathbb{S}\
- QF $\times D'3;41?'\#\&805\$\%L\&';\%541?'74?.\%;6'\%.\&J'<3;\%:\&'\&I34''''\&\#'A4\%.'G]E':37:;'\$1\#':\&'!G'8\&5\%D4\&\#F'G4?.%;'8\$110\%:\&'.31?'O1'\$1J'D45\&';3''''5&;;4O1'<math>\#\&L48\&'41873\#41?'''4''\&;6'\&7\&8\%548\$7'8O1\#34\%;6'\&1\%5\$18\&)\&C4\%'\#O05;'O5'A\$7BA$J;F'''$

O5?\$14m\$%O1'TO5'4D'41'%. &'8\$; &'%. \$%%. &'''50#3841?'O5?\$14m\$%O1'4; '\$'; %3#&1%'?5O3''p'4%'; . O37#': &'%. &45'\$#L4; O5'D5O < '%. &'
__DD48&'OD'2%3#&1%X1LO7L& < &1%I'%O'; 3: <4%'%AO'AO5B'O5#&5; '%O'%. &' K O5B'__5#&5' > &1%&5'\$%'7&\$; %' (, '#\$J; '''54O5'%O'%. &45'
&L&1%F'

"""" (\(\mathbb{\text{W'}}\-.\&\text{D45};\)\(\mathbb{\text{AO5B'5&I}}\] 3&;\(\text{

''''''*W-. &'; &801#'A05B'5&I 3&; %'A037#'1&&#'%0': &'&1%&5&#'\$%7&\$; %'(, '#\$J; '''5405'%0'%. &45'&L&1%'\$1#';. 037#'41#48\$%\''
D05'/>']7&8%5484\$1; '%0'EX2>__i i]>-'%. &'L&1#05@; '&7&8%548\$7'R%\$47; R'D50<'%. &'/>'&7&8%548\$7'''\$1&7'708\$%&#'41'%. &'70\$#41?'
#08B'0D'>05805\$1F''-. &'%<&'; ''&84D4&#';. 037#': &'%. &'70\$#^03%'%<&'D05'%. &'L&1#05F'

qX1'%. &'&L&1%'%. \$%'%. &'/>'&7&8%5484\$1;'#O'10%'\$554L&'05'\$5&'7\$%&'D05'%. &45';8. %&#'8011&8%'\$1#'#4;8011&8%'\$4<&;6'%. &'/>'''50#3841?'05?\$14m\$\$401'T05'__2X'5&''5&;&1%\$\$4L&6'41'%. &'8\$;&'OD'\$';%3#&1%'?503''\$\$'<3;%8\$77'%. &'/>'\$65B'__5#&5'\$81\%5'\$17*\\$55\$1?&'D05'\$'/>'&7&8\\$5484\$1'\%0'''\\$5D05<'%. &'\%4\\$41'\05'\03\%''

7) (=#\$P#<0=' \$1&002D?\$

K. 47&'%. &'90: ;. \$<'-. &\$\%5'=5\%; '>&1\%5'ODD&5; '\$'D377'\$55\$J'OD'%. &\$\%548\$7'5&; O358&; 6'<O; \%'&L&1\%; '. &7\#'41'%. &'90: ;. \$<'-. &\$\%5'=5\%; '>&1\%5'L&13&; '\$5&'74<4\%#'\%0': \$;48'; &\%3''; '01'; \%\$?&'%. \$\%'3\#744\m\&'10'''. J;48\$7'\$7\%5\$\#01; '\%0'\%. &';\\\$\$?&'
T41873\#41?'\%. &'3; &'OD'''\$41\#\\\$'\$;'; &\%3'''\$1\#': 5\&\$B'\#OA1'\#<&'DO5'\&L&1\%; '4; '74<4\\#\#'\#3&'\%0'\%. &'L&13\&': &41?'\41'. 4?. '\#&<\$1\#F'

-. &'28&1&'2. O"6'D05'41; %\$18&6'ODD&5; '\$'7\$5?&'8\$%\$70?'OD'41L&1%05J'OD'"50"; 6'"7\$%D05<; '\$1#'0%. &5': \$;48'; %\$?&';8&1&5J' %. \$%'< \$J': &'5&; &5L&#'D5O<'%. &'-. &\$%5&'E&"\$5%< &1%'41'\$#L\$18&F'-. &; &'4%&<; '\$5&'O1'D47&'A4%. '%. &'-. &\$%5&'E&"%F' =##4%HO1\$77J6'%. &'28&1&'2. O"'. O3; &; '\$'50: 3; %; 3""7J'OD'8O1; %538%HO1'%O07; 6'\$701?'A4%. '\$'%5\$41&#'28&1&'2. O"' 9&"5&; &1%\$ML&'A. O'A47': &'01;4%&'%O'; 3"&5L4; &'41#4L4#3\$7; '#O41?'%. &': 34#F'8' D\$Y, 0C; 0' =\$)" ()\$) (3#<\$AC(2#\$4#<A#20(CD\$ *#Z, 0*0' =\$A&B#*\$)&&C<6\$*#Z, 0*#<\$(\$72#' #\$7"&A\$<, A#*T0<&*\$&' <0)#5\$Q' CD\$72#' #\$7"&A\$A&B#*\$)&&C<\$(*#\$(CL&B#; \$)&\$Y#\$, <#; \$.&*\$Y, 0C; <\$4<),; #') <\$(*#\$' &)\$(CL&B#; \$)&\$Y*0' =\$0' \$)"#0*\$&B' \$A&B#*\$)&&C<65\$K7&\$; &'10%'%. &'28&1&'2. O"'. OA&L&5' #0&; '10%'; 3""7J'7\$: O5F'24<47\$57J6'%. &J'#O'10%'; 3""7J'"\$41%'\$1#'0%. &5'801; %538%HO1'<\$%&54\$7; 'T41873#41?': 3%'10%'74<4%#'%O': 53; . &; 6'AOO#6'. \$5#A\$5&WF'-. O; &'4&C; 'AO37#'1&&#'%O': &""358. \$; &#': J'%. &'?503"'. O; %41?%. &'&L&1%F'

 $-. \& "`\& \%\%01' < 3; \%': \& `\& < \$48\#'\%0' \frac{5\%\$8F0'' \& 5\$\%01}{M:8F\&\#3'} ``A\&\&B; "`5405'\%0'\%. \& 45'; . OA6'; O'\%. \$\%9-=>'H$1\$? \& < \&1\%' $1\#'\%. \& '-. \& \$\%5\&' E\& "$5\% < &1\%'. $; '$ < "7&'\% < &'\%0'5&L4&A'\%. &'5&I 3&; \%$1\#'&1; 35&'\%. &5&\A477': &'10'801D748\%; 'A4\%. '\%. &'8\#$ < 48' < 4; ; 401'OD'\%. &'-. &$\%5&' E& "$5\% < &1\%'\\D'\%. &'; . OA'4; 'A4\%. 41'\%. &'D45; \%'\A&&B; 'OD'\%. &'D$\77'; & < &; \%26'\%. &''' &\%4\%01' < < 3; \%': &'5&8&4L&#'i _'G=-]9'-. $1'="54'N['OD'\%. &'''5&L4O3; '8\#$ < 48'J&$5F'$

- -. 4:'''&\\d01'<3:\\:\&':\3:<4\\&\\d#'\D05'4\\&<:':\38. '\\$:\\$'
 - (F 9&I3&;%%0': 0550A'\$1J'"50"; 'D50<'%. &'-. &\$%5&'E&"\$5%<&1%'
 - *F /0550A41?'0D'''7\$%D05<;6';%\$?41?'05'0%. &5'7\$5?&'D3514%35&'D50<'%. &'-. &\$%5&'E&''\$5%<&1%'

NF __1;4%&';%05\$?&'41'%. &'9-=>'L&13&;'OD'\$1J'4%&<;'DO5'%. &'''&5DO5<\$18&' , F -. &'3;&'OD'A\$%&5'\$1#'DOO#'O1';%\$?&' +F

-. &'; &8O1#\$5J'7O\$#^41'''O41%'4; '%. &'5&\$5'#OO5; 'OD'%. &'9-=>': &%A&&1'%. &'/O11'2%3#40'\$1#'H\$41'2%\$?&F''UO5'. &\$LJ' & I 34'' < &1%'\$'%538B'A4%. '\$'740%'?\$%&'4; '1&&#'\$; '%. &5&'4; '10'740%'41'%. 4; '708\$%401F''-. &'&C%&5405'#O3: 7&'#OO5; '< &\$; 35&' TO (R'C'*R\\$1#'%. &'41%&5405'; 41?7&'#OO5; '< &\$; 35&'TNZR'C'\(R\\$F'\X\\$4; '\$'07\$\\$'5077'\%0': 0%. 'L&13&; F'-538B; '8\$110\%': &'''\$5B&#' %. &5&'D05'&C\&1#&#'''&540#; 6'\$; '4\@, '\$1'&<&5?&18J'L&. 487&'m01&F'''

 $\begin{array}{l} K7\&\$;\&'10\%\&'\%.\ \$\%\%.\ \&'/>'\&L\&1\%''50\#38\&5'4;'5\&;''01;4:7\&'D05'8005\#41\$\%1?'\$1\#'\$55\$1?41?'A4\%.\ '/0;\%01'>077\&?\&@,'\\ -5\$1;''05\%\$\%01'\$1\#'K\$5B41?'2\&5L48\&;'E\&''\$5\%<\&1\%L4\$'&<\$4'T\$5\$1;''05\$\$MO1\M:8F&\$3\\M\A4\%.\ '5\&?\$5\#;'\$0'''\$5B41?'D05'\$1J'\&C\$85\$1\$7'L&1\#05@,'L&.487&;'\$;;084\$\\#'A4\%.\ '\$1'\&L&1\\F''' \\ \end{array}$

9C#('\$I A\$1&CO2D\$M\$1&<)U: T#')\$: T(2, ()0&'\$1*&2#;, *#?\$

]L&5J'?503'''4;'&C'''&8%&#'%0'7&\$L&'%. &'L&13&'87&\$1'\$1#'41'?00#'801#4%01F''-. \$%41873#&;'\$77'\$5&\$;';38. '\$;'%. &';%\$?&6';%\$?&'A41?;

0Q%7N8>\$! N: 8!: 0\$80! 7\$9: K!: 0\$40! 896\$>8K8L: >: K!\$7! 8RR?\$

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