JS 123/WI2021

?\$"H<M"7A"%>"(SS86I)7C7A7@>"4@(6A8"V@4(A7>O"@>",866@67A&"%>)"A84(67,D0"R866@67A&"7A"486,%7>:D"@>8"@V",*8"&%Q@6" S6@':8&A",*%,"8>)%>O86"*(&%>"A84(67,D",*6@(O*@(,",*8"T@6:)0"\$7>48"GWHH",*8"A(448AA7C8"B\$"O@C86>&8>,A"*%C8" '88>"AS8%6*8%)7>O"%"O:@'%:"T%6"@>",866@6"T*74*"4@>A(&8A"%"

! ''#\$%&' : &%, \$05+0'') '?@&A#0\$&*B'

! "#\$%&'="\$ / (+>'1)40)&'

• <i>II</i> ψ // w () • <i>J</i> I (9) • ψ / (10)	
-)%+\$#,+''\$!"	#\$%&'())*%"+*%,%"/*0102"
10,&"2",(+0")!"	# 3 % 4 5 (%6678" 9 %::";<;=."\$%>"?@A8"\$,%,8"B>7C86A7,D."\$%>"?@A8."EF"G;HG <i JJ;J2"</i
3&4&56")&!"	#KJL2"#G <k"hlmn2"< th=""></k"hlmn2"<>
7 / (04!"	$#A\%\&'())*\%00*\%,\%-PA\emptysetA(08)(2")$
10,&'8''#\$%!"	#/*@>8">(&'86!"LN;"GL;"NLL;"#R*7A"7A"&D"48::"S*@>8">(&'860"/:8%A8"4%::" @>:D"7>"8&8608>4D2"R*8"'8A,"T%D",@"4@>,%4,"&8"7A",*6@(O*"8&%7:9'=D" %SS@7>,&8>,2""
! 4(%%':(;%<30/&!"	#U>:7>82"
! 4(%%\$'''' / !"	#E%>C%A2"

! "#\$%&'()*'!")+(,+'-)."\$/(+0")'

!''#\$%&'()\$''*%'#(!)(+,-.(/'0010%#2(34*()'&''0%\$5(6748%4'9(:%4\$'0(,;,+(6!34''305(<(=(!34''305(,,9(

68\(768)"4@(6A8"68%)7>OA"T7::"V7>)"7,"7&S@AA7':8",@"O8,"%"O@@)"O6%)8"%>)"&%D"T8::"8>)"(S"V%7:7>O",*7A"4@(6A80" E(,,7>O"4@6>86A"@6"46%&&7>O"'8V@68"8X%&A."T*74*"7A">8C86"%"O@@)"7)8%"V@6"A,()8>,A"T*@"%68"A867@(A"%'@(," :8%6>7>O."7A":7-8:D",@":8%)",@")7A%A,86"7>"%>"@>:7>8"4@(6A8b2"R@"687,86%,8."4@(6A8"&%,867%:A"A(4*"%A",*8"AD::%'(A." $\begin{aligned} & S@AA7'7:7,78A"V@6"68:\%,8)"68A8\%64*i" a *\%,"7>,868A,7>O"\ (8A,7@>A"\#\%,":8\%A,",*6882"4\%>"T8"\%A-",@",*8"\%(,*@6i"["T7:::">@,"%448S,"%>D"467,7\ (8A"%V,86",*8")8\%):7>80^{\#""} \end{aligned}$

M0

"