



S MN MJ GA W R ? Q ? NMJ GA WRF ? R A ? J AS J
MP A CPR ? ? G L C Q C Q K C L R B M C Q L M R R ? I C N J ? A C G
? Q Q C Q K C L R B M C Q L M R R ? I C N J ? A C G

Y
Y
Y
Y
Y
Y
P KP ? B C M
P KP ? B C M

P Q ? P C ? J J M U C B B S P G L E C V ? K G L ? R G M

hP ? LEA Ch

sM N M J G A W	sM N M J G A W
K C M P E G ? fM K N S B C ? P C B L ? R G M L ? J ? Q C B Q Q K B 2 R R O O A ? B K G L G G R & P C B C Q M 4 P 4 ? L B D C :	sM N M J G A W
K C P K ? L W	Y
IML E oMydx mL E C L C P ? J 4 N P G K ? L P M R Q R S J B M U L C R B O R ? M P S C Q C A R C Q R O ? L B C V ? K G L ? R G M L Q :	yA G C L R G D G A A ? J A S J ? R M P Q U G R F Q N C A G D 3 C B K M B C V ? K G L ? R G M L O D M P y C A M L B ? P W G Q K P ? B C a 2 : F C P C C V ? K G L ? R G M L O D M P y C A M L B ? P W E O K P ? B C U 2 y A F M M . N M J G C Q P C E ? P B G L E R F C S Q C M D B G E G R ? J B C T G A C A ? J A S J ? R M P Q ? P C ? J J M U C B B S P G L E Q A F M M J R C Q K ? R F C K ? R G C Q M M P ? ? P W J C T Y D E 2 Q K P ? B C R
IS L E ? P W	sM N M J G A W
mP 4rhQJ ? K G A xCN : MD	? J A S J ? R M P Q ? P C ? J J M U C B B S P G L E R C Q R Q ? L B C : F C S Q C M D A ? J A S J ? R M P Q ? L B A M K N S R C P 2 G Q N C F ? L B G O @ ? Q C B M L R F C R C ? A F C P Q) B G O A P C R G M L :
mP C J ? L B	sM N M J G A W : : F C P C ? P C P C D C P C L A C Q R M R F E C L C P ? J @ S R L M R O M K A R B C K R M K A 2 B R C Q R C V ? K G L ? R G M L Q : yR S B C L R Q ? P C N C P K G R R C B R M S Q C A ? J A S J ? R M P Q

Y

? J A S J ? R M P Q ? P C ? J J M U C B B S P G L E R C Q R G L E :

Exhibit 20: National Policies Regarding Use of Digital Devices in Mathematics Examinations

Reported by National Research Coordinators

2019

(Continued)

Country	National Policies Regarding Use of Digital Devices in Mathematics Examinations	
	Grade 4	Grade 8
1MC?, BCNI MD	' ODDCK CLRMDJ?FLGE E K ?FCK ?RQA?L NFMTC CBSCLROU GE MNMFLS QSRVSCC RCAF LMMEQ?JRMMDG AJSBGE A?JASJPRMQ ANK NSRCPQ ?LB CBSA?RML?J QMDU?FC, BCNCLBGE ML FFCJ?FLGE ANLRCLR?LB FFC K CFMBQMD?ODDCK CLR	9?K C?QDMP - P?BC Ž
1MVTM	4MNMJAW	Y
1SU?GR	4MNMJAW	4MNMJAW
2?FTG	4MNMJAW	Y
2C@?LML	Y	4MNMJAW
2GFS?LG	4MNMJAW@SRNFK ?PVAFMJFC?AFCPQA?L SCC ANK NSRCPQ *MPR@CRO? GE FFCJ?FLGE NFMACD?RFFCQBGAFCRMLI ; CC MD A?JASJPRMQ GE NFK ?PVAFMJQ@L MRCAMK K CLBCBI	4MNMJAW@SRCBSCLRO@CEGE ANK NSJQMPW/ ANSFQOGE - P?BC ž : C?AFCPQA?L SCC ANK NSRCPQ *MPR@CRO? GE FFCJ?FLGE NFMACD?RFFCQBGAFCRMLI
3 ?JVQB	Y	' CQCAGJAGASJPMIL FFC SCC MDQAGL RBA A?JASJPRMQ GE FFC OAFMMJ ?LB NS@JA CV?K GE?RML F?Q@CCL BGF@SRCB RV?JCAFMMQ 9RSBCLRO ?FC MLJW?JMU CB RVSOC LMLNFMPEPK K ?@C OAGL RBA A?JASJPRMQ BSRGE CV?K GE?RMLQ
3 ?JR	4MNMJAW	Y
3 MLRCLCEPM	4MNMJAW	Y
3 MRAAM	9RSBCLRO?FC LMR?JMU CB RVSOC ?LWBGE@J BCT@C BSRGE RCRQMP CV?K GE?RMLQ	: FFC SCC MDLMLNFMPEPK K ?@C A?JASJPRMQ BSRGE CV?K GE?RMLQ@ CMK CRK CQ?JMU CBI
4 CRFCP?LBQ	4MNMJAW	Y
4 CU >C?JPLB	4MNMJAW: FFC SCC MDRCAF LMMEW@B GASQDB ECLCP?JW@SRLMR CQCAG?JMU GE GE FFC K ?FCK ?RQA?FC? MDRFC ASFASJSK I	9?K C?QDMP - P?BC Ž
4 MFF 3 ?ACBMLG	4MNMJAW	Y
4 MFFCL /CJPLB	4MNMJAW?QFCFC?FC LML?RML?JRCRQMP CV?K GE?RMLQGE - P?BC žI	Y
4 MU?W	4MNMJAW	4MNMJAW
5 K ?L	4MNMJAW	4MNMJAW
6?I @RPL	4MNMJAW	Y
6FCBNECO	4MNMJAW?JFMS EF CBSCLRO?FC @?FFCB DMK SQGE RCAF LMMEWAM A?NSFC RCRQCK QBSRGE L?RML?J CV?K GE?RMLQ	Y
6MPLB	4MNMJAW	Y
6MFE?J	4MNMJAW	4MNMJAW
7 ?RP	4MNMJAW	4MNMJAW
8MK ?LG	Y	9RSBCLRO?FC LMR?JMU CB RVSOC ?LWBGE@J BCT@C BSRGE RCRQ?LB CV?K GE?RMLQ
8SCQBL , CBCP?RML	4MNMJAW	4MNMJAW
9?SBG P?@G	* @RJBCT@CQ?FC LMR?JMU CB BSRGE RCRQ	9?K C?QDMP - P?BC Ž
9CR@G	4MNMJAW?QFCFC?FC LML?RML?JRCRQMP CV?K GE?RMLQGE - P?BC žI 9RSBCLRO?FC LMR?JMU CB RVSOC ?LWBGE@J BCT@C BSRGE RCRQMPMPJ CV?K GE?RML, U GE FFC CVA@RML MDRCBSCLROU GE @BGTBS?J CBSA?RML?J NPLQ	Y
9GE?NMF	4MNMJAW) ?JASJPRMQ?FC @FMSACB MLJW?DRCP - P?BC žI	4MNMJAW
9JMT?I BCNS@JA	4MNMJAW: C?AFCPQ?LB CAFMMQF?TC BGAFCRML MTCPCAG@MLQ ?@MSRA?JASJPRMPSQD	Y
9MSRE ' DPA?	4MNMJAW	4MNMJAW
9N?GE	4MNMJAW	Y
9UCBCL	4MNMJAW@SRFCFC?FC CMK C CR?CK CLRQ?@MSRBE@J RMDGE FFC ANFC ANLRCLRMDRFC QMD?@SQRF?R?FC CSNMVDB RMC@?ODDCKBI	9?K C?QDMP - P?BC Ž
: SR CW	4MNMJAW	4MNMJAW
; L@CB' P?@+K @?RQ	4MNMJAW	: FFC SJRMLC@FMA@C@CK QML CLB MDRFK ?ODDCK CLRQ? žfyzfi' MD FFC?ODDCK CLR?FC?BK @GRFCB TG ANK NSRCPQ

Exhibit 20: National Policies Regarding Use of Digital Devices in Mathematics Examinations

Reported by National Research Coordinators

2019

(Continued)

Country	National Policies Regarding Use of Digital Devices in Mathematics Examinations	
	Grade 4	Grade 8
;	3	3
Benchmarking Participants		
5	4	9
7	4	:
3	;	4
-	9	9
<	9	9
3	9	9
'	9	9
*	9	9