CBA Problem SolvingCBA MathematicsDigital ResultsCountriss/LeonomiesMeanS.ECountriss/LeonomiesMeanS.ECountriss/LeonomiesMeanS.ESingapore562(1.2)Singapore566(1.3)Singapore567(1.2)Korea561(4.3)Shanghai-China550(3.4)Korea553(3.5)MeanJapan520(3.3)Korea553(5.4)JaponChina543(3.3)Mog Korg-China540(3.3)Japan539(3.3)Shanghai-China512(2.3)Shanghai-China534(2.9)Chinese Taipiei577(2.8)Etonia523(2.7)Australia523(2.4)Canada516(2.2)Inteland521(3.7)Australia512(2.3)Belgium512(2.5)Inteland515(3.9)Etonia515(2.5)France508(3.3)United States511(4.5)France511(4.4)Australia507(3.5)Inlu504(4.5)Inaly510(4.0)Inlu's State517(3.5)Inlu504(4.5)France508(3.3)United State511(4.6)Australia507(3.5)Inlu504(4.5)France509(3.3)United State511(4.6)Australia507(3.5)Inlu504(4.6)Cache Republ				CBA Mathematics			Digital Das ding		
Singapore   562   (1.2)   Singapore   564   (1.3)   Singapore   567   (1.2)     Kerea   561   (4.3)   Skorea   553   (.6)     Japan   552   (3.1)   Korea   553   (.6)     Macao-China   540   (3.9)   Macao-China   550   (6.4)   Japan   552   (.2)     Sinnghai-China   540   (3.9)   Macao-China   543   (1.1)   Canada   532   (2.3)     Sinnghai-China   524   (2.9)   Chinese Taipei   537   (2.8)   Estonia   521   (2.7)     Canada   526   (2.4)   Canada   523   (2.9)   Chinese Taipei   519   (3.0)     Ganada   523   (1.9)   Estonia   512   (2.5)   France   508   (3.3)   United States   511   (4.5)     France   511   (4.4)   Austria   507   (5.5)   Ifaly   504   (4.5)     Patomia   5	CBA Problem Solving		0			C E	Ŭ	U	CE
Kora   561   (4.3)   Shanghai-China   562   (3.4)   Kora   573   (1.5)   Hong Kong-China   550   (3.6)     Japan   552   (3.1)   Korea   533   (1.5)   Hong Kong-China   550   (3.6)     Macao-China   540   (3.9)   Macao-China   533   (1.1)   Canada   532   (2.2)     Shanghai-China   536   (3.3)   Japan   539   (3.3)   Shanghai-China   531   (2.1)   Chines   531   (2.2)   Chines   531   (2.1)   Particitititititititititititititititititit	-			•					
Japan   552   (3.1)   Korea   533   (4.5)   Hong Kong-China   540   (1.6)     Macac-China   540   (0.3)   Macac-China   540   (3.3)     Shanghai-China   534   (3.3)   Japan   539   (3.3)   Shanghai-China   531   (2.3)     Chinese Taipei   534   (2.2)   Chinese Taipei   537   (2.8)   Estonia   523   (2.8)     Canada   526   (2.4)   Canada   520   (2.3)   Macan-China   512   (2.7)     Australia   526   (2.4)   Renace   (3.3)   Macac-China   510   (3.1)     Initud Kingdom   517   (2.1)   Reducina   510   (3.1)   (1.16)   (3.3)   Macac-China   510   (3.1)     Initud Kingdom   517   (2.1)   Reducina   503   (3.1)   (1.16)   (3.1)   (1.16)   (3.1)   (1.16)   (3.1)   (1.16)   (3.1)   (1.16)   (3.1)   (1.16)   (3.1) <td< td=""><td>01</td><td></td><td></td><td>0.1</td><td></td><td></td><td>01</td><td></td><td></td></td<>	01			0.1			01		
Macao-China540(10)Iong Kong-China550(3.4)Iapan543(1.1)Canada542(3.3)Biong Kong-China530(3.3)Japan530(3.3)Japan530(3.3)Japan530(3.3)Japan531(3.7)(2.8)Chinase Taipei534(2.9)Chinase Taipei537(2.8)Estonia520(2.1)Australia521(2.1)Australia521(2.1)Landan531(3.0)Finland523(2.3)Belgium512(2.2)Chinase Taipei519(3.0)United Kingdom517(2.3)Belgium512(2.5)Chinase Taipei511(3.6)France511(3.4)Australia508(3.6)Harde States511(3.6)Rather Landas510(4.1)Australia508(3.6)Iatiy499(4.2)Belgium502(2.6)Caxch Republic509(3.1)United States511(4.5)(3.6)(3.6)(3.6)(3.6)(3.6)Carch Republic509(3.1)United States488(4.1)Norway500(3.6)(3.6)Carch Republic508(3.9)Slovak Republic497(3.6)Sorean486(3.6)Carchad508(3.9)Slovak Republic477(3.6)Sorean480(3.6)Abursia508(3.9)Slovak Republic470(3.9) <t< td=""><td></td><td></td><td></td><td>U</td><td></td><td>. ,</td><td></td><td></td><td>. ,</td></t<>				U		. ,			. ,
Hong Kong-China543(1.1)CanadaS12(2.3)Shanghal-ChinaS34(2.4)JapanS39(3.3)Shanghal-ChinaS12(2.8)Chinase TaripeiS34(2.9)Chinase TaripeiS12(2.8)StoriniaS12(2.1)AustraliaS23(2.3)StoriniaS16(2.2)Iclinase TaripeiS19(3.0)InilandS23(2.3)BelgiumS12(2.5)Chinase TaripeiS19(3.0)United KingdomS17(3.2)BelgiumS03(3.3)Macao-ChinaS11(4.5)FranceS18(3.1)AustraliaS04(3.5)Inited StatesS12(2.6)NetherlandsS11(4.4)AustraliaS07(3.5)Inited StatesS12(2.6)Cacch RepublicS10(3.1)United StatesS16(3.1)United StatesS16(3.1)Cacch RepublicS10(3.1)United StatesS18(3.2)Scate Republic481(3.1)DelgiumS10(3.0)United StatesS18(3.0)Scate Republic493(2.9)Scate Republic481(3.1)DelgiumS10Scate Republic493(2.9)Polnad493(2.9)Scate Republic434(3.1)DelgiumS10Scate RepublicS10Scate RepublicS10Scate RepublicS10Scate RepublicS10Scate RepublicS10Scate Republic <t< td=""><td>· 1</td><td></td><td>· /</td><td></td><td></td><td>` '</td><td></td><td></td><td></td></t<>	· 1		· /			` '			
Shanghai-China536(3.3)Japan539(3.3)Shanghai-China531(3.7)Chinese Taipei534(2.0)Chinese Taipei537(2.8)Stotai(2.7)Australia523(1.9)Estonia516(2.2)Ireland520(3.0)Finland523(2.3)Belgium512(2.5)Ireland510(3.0)United Kingdom517(2.2)France508(3.3)Macoa-China515(3.6)France511(3.4)Australia508(3.6)United States511(3.6)Netherlands511(3.4)Australia507(3.5)Ialy500(3.5)Carch Republic510(3.0)Ialy490(3.1)Belgium500(3.5)Carch Republic509(3.1)United States498(4.1)Norway500(3.5)Carch Republic509(3.1)United State498(4.1)Norway500(3.5)Germany509(3.0)United State498(4.1)Norway500(3.5)Jornet Ale500(3.0)Sovak Republic497(3.0)Sovak Republic498(4.0)Austria506(3.0)Sovak Republic497(3.0)Sovak Republic498(4.0)Austria500(3.3)Sovak Republic498(3.0)Sovak Republic498(4.0)Demark490(3		540	. ,	Hong Kong-China	550	(3.4)	• 1	545	
Ichnese Taipei534(2.9)Chinese Taipei537(2.8)Estonia523(2.9)Canada526(2.4)Canada523(2.9)Natralia521(2.1)Natralia521(2.1)Finland523(2.9)Belgium512(2.9)Cliense Taipei519(3.9)Dinted Kingdom517(3.0)Cliense Taipei511(3.6)Estonia515(2.5)Fnace508(3.0)Nicked States511(3.6)France511(3.4)Australia507(3.5)Nicked States(3.1)Nicked States(3.1)Rahe511(3.4)Australia507(3.5)Nicked States(3.1)Nicked States(3.1)Carch Republic508(3.1)United States498(4.1)Norway508(3.1)Norway508(3.1)Carch Republic508(3.6)Norway498(3.2)Norway498(3.1)Norway498(3.1)Autralia508(3.6)Norway498(3.2)Norway498(3.1)Norway498(3.1)Autralia508(3.6)Norway498(3.2)Norway498(3.1)Norway498(3.1)Autralia508Norway498(3.2)Norway498(3.1)Norway498(3.1)Autralia508Norway498(4.9)Norway10.10Norway<				Macao-China		· /			
Canada526(2.4)Canada523(2.2)Australia521(1.7)Australia523(2.3)Estonia516(2.2)Ireland520(3.0)Iniland527(2.3)Belgium512(2.5)Chinese Taipei519(3.0)United Kingdom517(4.2)Cermany509(3.3)United States511(4.5)France518(3.4)Australia508(1.6)France511(4.6)Netherlands511(4.4)Australia507(3.5)Ialy502(2.6)Cach Republic509(3.1)United States498(4.1)Norway603(3.6)Germany509(3.6)Norway498(2.8)Sweden498(3.4)United States508(3.9)Slovak Republic497(3.5)Denmark496(2.9)Belgium508(3.9)Slovak Republic497(3.5)Denmark496(4.4)Norway503(3.3)Sweden498(3.1)Slovak Republic497(3.5)Denmark497(3.5)Portugal498(3.2)Denmark496(2.7)Germany494(4.6)Norway503(3.3)Sweden498(3.1)Slovak Republic497(3.5)Denmark471(3.5)Portugal498(3.0)Poland479(3.5)Slowak Republic499(3	0			· •	539	· /	0	531	
Australia5231.9Estonia5162.9Ireland5203.0Finland5232.3Belgium5122.5Chinese-Tlapici519(3.0)United Kingdom517(4.1)Germany509(3.3)Macao-China515(4.5)France511(3.4)Australia508(3.5)United States511(4.5)France511(4.4)Austria507(3.5)Ialy509(3.6)Retherlands510(4.0)Ialy499(4.2)Belgium502(2.6)Czech Republic509(3.1)United States498(4.1)Norway500(3.5)Germany509(3.6)Norway498(2.8)Sweden498(3.4)United States508(3.5)Denmark497(3.5)Denmark496(3.1)Relgium506(3.6)Ireland493(2.9)Portugal486(4.4)Norway503(3.3)Sweden499(3.1)Slovenia471(4.5)Denmark497(2.9)Poland473(3.9)Slovenia471(3.9)Navay498(3.1)Slovenia471(3.9)Slovenia471(3.9)Sweden498(3.1)Slovenia471(3.9)Slovenia471(3.9)Norway493(3.9)Slovenia475(3.2)Rusain Federation <t< td=""><td>•</td><td></td><td></td><td>-</td><td></td><td></td><td>Estonia</td><td>523</td><td></td></t<>	•			-			Estonia	523	
Ininand52362.3Belgium51262.5Chinese Taipei5196.30United Kingdom51764.2Germany5086.33Macao-China5156.09Estonia5166.116.34Australia5086.35United States5116.43Netherlands5116.44Australia5076.35Ialy6.436.43Italy5106.10Inited States4886.14Norway5006.35Germany5096.31United States4986.14Norway5006.35Germany5086.30Isovay4986.25Demark4966.27Germany4946.40Belgium5086.30Isovay4936.29Portugal4806.41Norway5036.33Sweden4906.27Gormany4946.40Norway5036.33Sweden4906.29Polaria4806.39Ireland4986.30Slovak Republic4716.50Slovak Republic4746.50Dermark4976.29Poland4896.13Slovak Republic4746.30Sweden4916.30Spain4756.32Slowak Republic4746.50Slovak Republic4836.30Slovak Republic4756.32Slowak6.41Slovak Republic4836.40SlowakS	Canada	526		Canada	523	(2.2)	Australia	521	
United Kingdom517(4.2)Germany509(3.3)Macao-China515(1.6)Estonia515(2.5)France508(3.3)United States511(4.5)France511(4.4)Austraia508(1.6)France510(3.6)Netherlands511(4.4)Austraia507(3.5)Italy504(4.3)Italy510(4.0)Italy499(4.2)Belgium502(2.6)Cacch Republic509(3.1)United States498(2.1)Norway500(3.5)Germany508(3.9)Slovak Republic497(3.5)Denmark498(2.9)Inited States508(3.9)Slovak Republic497(3.5)Denmark498(3.0)Austria506(3.6)Ireland493(2.9)Potngal480(3.9)Ireland498(3.0)Slovak Republic497(3.5)Slovak Republic474(3.5)Portugal494(3.0)Slovak Republic489(4.0)Slovak Republic474(3.5)Sweden491(2.9)Slovak Republic474(3.5)Slovak Republic489(4.0)Sweden491(2.9)Slovak Republic474(3.5)Slovak Republic489(4.0)Sweden491(2.9)Slovak Republic489(4.0)Slovak Republic489(4.0)Slovak Republ		523			516		Ireland	520	· · ·
Estonia515(2)France508(3)United States511(4)France511(3,4)Australia508(1,6)France511(3,6)Netherlands511(4,4)Austria507(3,5)Ialy502(2,6)Cacch Republic509(3,1)United States498(4,1)Norway502(2,6)Cacch Republic509(3,1)United States498(2,8)Sweden498(3,4)United States508(3,9)Slowak Republic497(3,5)Demmark496(2,7)Belgium508(3,5)Demmark496(2,7)Germany494(4,0)Austria506(3,6)Ireland493(2,9)Portugal486(4,4)Norway503(3,3)Sweden490(2,9)Austria480(3,9)Ireland498(3,2)Russian Federation489(4,0)Slowak Republic474(3,5)Demmark497(2,9)Poland477(4,1)United Arab487(1,2)Spain466(3,9)Slowak Republic489(3,1)Slovenia486(4,4)Slovenia466(3,9)Slowak Republic483(3,4)SlowakSlowakGasin Federation489(3,1)Slovenia466(3,9)Slovak Republic481(4,1)United Arab Emirates434(2,2)Hungary<	Finland	523	(2.3)	Belgium	512		-	519	
France5116.1Australia508(1.6)France511(1.6)Netherlands511(4.4)Austria507(3.5)Iluly504(4.3)Italy510(4.0)Iluly499(4.2)Belgium502(2.6)Czech Republic509(3.1)United States498(4.1)Norway509(3.6)Germany509(3.6)Norway498(2.8)Sweden498(3.9)Belgium508(2.5)Denmark496(2.7)Germany494(4.0)Austria506(3.6)Iceland493(2.9)Portugal486(3.7)Austria506(3.6)Iceland490(2.9)Portugal480(3.9)Ireland498(3.0)Sweden490(2.9)Portugal471(4.5)Denmark497(2.9)Poland489(4.0)Slovak Republic473(3.5)Portugal494(3.6)Portugal487(1.2)Spain466(3.9)Sweden491(2.9)Slovenia475(3.2)Russian Federation466(3.9)Slovak Republic483(3.6)Hungary470(3.2)Brazil450(4.1)Slovak Republic483(3.6)Hungary470(3.9)Brazil450(4.1)Slovak Republic483(3.6)Hungary470(3.9)Brazil </td <td>U</td> <td>517</td> <td></td> <td>Germany</td> <td></td> <td>(3.3)</td> <td></td> <td>515</td> <td></td>	U	517		Germany		(3.3)		515	
Netherlands511(1,4)Austria507(3,5)Italy504(4,3)Italy510(4,0)Italy499(4,2)Belgium502(2,6)Czech Republic509(3,1)United States498(4,1)Norway500(3,5)Germany509(3,6)Norway498(2,8)Sweden498(3,4)United States508(3,9)Slovak Republic497(3,5)Denmark496(2,7)Belgium508(3,6)Ireland493(2,9)Portugal486(4,1)Norway503(3,3)Sweden490(2,9)Austria480(3,1)Ireland498(3,2)Russian Federation489(4,0)Slovak Republic474(3,5)Portugal494(3,6)Portugal489(4,1)Slovak Republic474(3,5)Portugal494(3,6)Portugal489(3,1)Slovenia471(1,3)Sweden491(2,9)Poland487(1,2)Slovain Republic474(3,5)Slovak Republic489(3,4)Spain475(3,2)Russian Federation466(3,9)Slovak Republic483(3,6)Hungary470(3,9)Israel461(5,1)Poland473(3,1)Brazil414(2,2)Hungary450(4,9)Slovak Republic483(3,6)Hungary<	Estonia	515		France		(3.3)	United States	511	
Italy5106.0Italy4996.2Bejum502(2.6)Czech Republic509(3.1)United States498(4.1)Norway500(3.5)Germany509(3.6)Norway498(2.8)Sweden498(3.4)United States508(3.9)Slovak Republic497(3.5)Dermark495(2.9)Belgium508(2.5)Dermark496(2.7)Germany494(4.0)Austria506(3.6)Ireland493(2.9)Portugal486(4.4)Norway503(3.3)Sweden490(2.9)Austria480(3.9)Ireland498(3.2)Russian Federation489(3.0)Slovak Republic474(3.5)Dermark497(2.9)Poland489(3.1)Slovenia471(1.3)Sweden491(2.9)Slovak Republic483(3.6)Hungary470(3.9)Israel466(3.9)Slovak Republic483(3.6)Hungary470(3.9)Israel461(5.1)Poland481(4.4)Israel447(5.6)Chile452(3.6)Slovak Republic483(3.6)Hungary470(3.9)Israel461(5.1)Poland471(1.1)United Arab Emirates434(2.2)Hungary450(4.4)Slovak Republic483(3		511		Australia	508	` '		511	
Cach Republic509(3.1)United States498(4.1)Norway500(3.5)Gernany508(3.6)Norway498(2.8)Sweden498(2.4)United States508(3.6)Isolak Republic497(3.5)Denmark496(2.7)Belgium508(3.6)Ireland498(2.9)Portugal486(4.1)Norway503(3.3)Sweden490(2.9)Austria480(3.1)Ireland498(3.2)Russian Federation489(4.0)Slovak Republic477(4.5)Denmark497(2.9)Portugal480(3.1)Slovenia471(1.5)Portugal494(3.6)Portugal489(3.1)Slovenia471(1.5)Sweden491(2.9)Slovenia487(3.1)Slovenia471(1.5)Sweden494(3.6)Portugal489(3.1)Slovenia471(1.5)Sweden491(2.9)Slovenia473(3.1)Slovenia476(3.1)Sweden493(3.4)Slovenia475(3.2)Russian Federation460(3.1)Sweden493(3.4)Slovenia473(3.1)Slovenia470(3.1)Shoak Republic481(3.4)Slovenia470(3.1)Slovenia470(3.1)Slovenia476(3.1)Gluba420(	Netherlands	511	(4.4)	Austria	507			504	
Germany5093.60Norway498(2.8)Sweden498(3.4)United States508(3.9)Slovak Republic497(3.5)Denmark496(2.7)Belgium508(2.5)Denmark496(2.7)Germany494(4.0)Austria506(3.6)Ireland493(2.9)Portugal486(3.1)Norway503(3.3)Sweden490(2.9)Austria480(3.9)Ireland498(3.2)Russian Federation489(3.0)Slovak Republic474(3.5)Denmark497(2.9)Poland489(3.1)Slovenia471(1.3)Ortugal494(3.6)Portugal489(3.1)Slovenia471(1.3)Sweden491(2.9)Slovenia487(1.2)Spain466(3.9)Bloark Republic433(3.6)Portugal487(3.2)Russian Federation460(5.1)Slovak Republic433(3.6)Bungary470(3.9)Israel461(5.1)Slovak Republic433(3.6)Bungary470(3.9)Brazil436(4.9)Slovak Republic433(3.0)Brazil436(4.9)(4.1)(4.1)(4.1)Slovak Republic433(3.0)Brazil436(4.1)(4.1)(4.1)(4.1)(4.1)(4.1)(4.1)(4.1)(4.1)(4	Italy	510	(4.0)	Italy	499	(4.2)	Belgium	502	(2.6)
United States508(3.9)Slovak Republic497(3.5)Denmark496(2.7)Germany494(4.0)Belgium508(3.6)Ireland493(2.9)Portugal486(3.1)Norway503(3.3)Sweden490(2.9)Austria480(3.1)Ireland498(3.2)Russian Federation489(2.6)Poland477(4.5)Denmark497(2.9)Poland489(3.0)Slovak Republic474(3.5)Portugal494(3.0)Portugal497(2.9)Poland487(1.2)Spain466(3.9)Slovak Republic493(3.6)Portugal487(1.2)Spain466(3.9)Slovak Republic493(3.6)Fungary470(3.9)Russian Federation460(5.1)Slovak Republic493(3.6)Fungary470(3.9)Russian Federation460(5.1)Slovak Republic493(3.6)Fungary470(3.9)Russian Federation460(5.1)Slovak Republic473(4.1)United Arab Emirates434(2.2)Hungary430(3.0)(3.1)Slovak Republic473(3.1)Brazil473(3.1)Brazil436(3.1)(3.1)(3.1)(3.1)Slovak Republic473(3.1)Brazil(3.1)Brazil(3.1)(3.1)(3.1)(3.1)	Czech Republic	509	(3.1)	United States	498	(4.1)	Norway	500	(3.5)
Belgium508(2.5)Denmark496(.2.7)Germany494(.4.9)Austria506(.3.6)Ireland493(.2.9)Portugal486(.4.9)Norway503(.3.3)Sweden490(.2.9)Austria480(.3.9)Ireland498(.3.2)Russian Federation489(.2.6)Slovak Republic477(.4.5)Denmark494(.3.6)Portugal494(.3.6)Slovenia471(.1.5)Portugal494(.3.6)Portugal489(.3.1)Slovenia476(.3.7)Sweden491(.3.6)Portugal489(.3.1)Slovenia476(.3.7)Boyak Republic483(.3.6)Portugal477(.3.7)Slovenia461(.3.7)Slovak Republic483(.3.6)Hungary470(.3.9)Israel461(.5.7)Slovak Republic483(.3.6)Hungary470(.3.9)Israel461(.5.7)Slovak Republic483(.3.6)Hungary470(.3.7)Gamaria462(.3.7)Slovak Republic483(.3.6)Hungary470(.3.9)Israel461(.5.7)Slovaik Republic477(.3.6)Israel432(.3.9)Israel463(.3.7)Slovaik Republic476(.3.1)Israel432(.3.9)Israel433(.3.9)Slovaik Republic <t< td=""><td>Germany</td><td>509</td><td>(3.6)</td><td>Norway</td><td>498</td><td>(2.8)</td><td>Sweden</td><td>498</td><td>(3.4)</td></t<>	Germany	509	(3.6)	Norway	498	(2.8)	Sweden	498	(3.4)
Austria5066.7 6.9Ireland493(2.9)Portugal486(4.4)Norway503(3.3)Sweden490(2.9)Austria480(3.9)Ireland498(3.2)Russian Federation489(2.6)Poland477(4.5)Denmark497(2.9)Poland489(3.0)Slovak Republic474(3.5)Portugal494(3.6)Portugal489(3.1)Slovenia471(1.3)Sweden491(2.9)Slovenia487(1.2)Spain466(3.9)Russian Federation483(3.6)Purtugal477(5.0)Israel461(5.1)Slovak Republic483(3.6)Pungary470(3.9)Israel461(5.1)Poland481(4.4)Israel447(5.6)Chile452(3.6)Slovak Republic483(3.6)Hungary470(3.9)Brazil436(4.9)Slovak Republic483(3.1)Israel414(2.0)Hungary450(4.1)Slovak Republic483(3.1)Israel417(5.6)Chile Arab Emirates430(4.9)Slovak Republic476(1.5)Chile432(3.3)Brazil436(4.9)Slovatina476(1.5)Chile432(3.3)Brazil407(5.0)Gratia454(5.5)Israel457 <t< td=""><td>United States</td><td>508</td><td>(3.9)</td><td>Slovak Republic</td><td>497</td><td>(3.5)</td><td>Denmark</td><td>495</td><td>(2.9)</td></t<>	United States	508	(3.9)	Slovak Republic	497	(3.5)	Denmark	495	(2.9)
Norway503G.3.3Sweden490(2.9)Austria480(3.9)Ireland498(3.2)Russian Federation489(2.6)Poland477(4.5)Denmark497(2.9)Poland489(3.0)Slovak Republic474(3.5)Portugal494(3.6)Portugal489(3.1)Slovenia471(1.3)Sweden491(2.9)Slovenia487(1.2)Spain466(3.9)Russian Federation489(3.4)Spain475(3.2)Russian Federation466(3.9)Slovak Republic483(3.4)Spain477(5.6)Chile452(3.6)Slovak Republic483(3.4)Israel447(5.6)Chile452(3.6)Slovak Republic473(3.1)Israel417(5.6)Chile452(3.6)Slovak Republic476(1.5)Chile432(3.3)Brazil436(4.9)Slovak Republic476(1.5)Chile432(3.3)Brazil436(4.9)Slovak Republic476(1.5)Chile432(3.3)Brazil436(4.9)Slovak Republic476(1.5)Chile432(3.3)Brazil436(4.9)Slovak Republic476(1.5)Chile432(3.3)Brazil436(4.9)Slovak Republic454(5.5)Chile4	Belgium	508	(2.5)	Denmark	496	(2.7)	Germany	494	(4.0)
Ireland498(3.2)Russian Federation489(2.6)Poland477(4.5)Denmark497(2.9)Poland489(4.0)Slovak Republic474(3.5)Portugal494(3.6)Portugal489(3.1)Slovenia471(1.3)Sweden491(2.9)Slovenia487(1.2)Spain466(3.9)Russian Federation489(3.4)Spain475(3.2)Russian Federation466(3.9)Slovak Republic483(3.6)Hungary470(3.9)Israel461(5.1)Poland481(4.4)Israel447(5.6)Chile452(3.6)Slovenia476(1.1)United Arab Emirates434(2.2)Hungary450(4.4)Slovenia476(1.1)United Arab Emirates432(3.3)Brazil436(4.9)Slovenia476(3.1)Brazil421(4.7)United Arab Emirates497(0.3)Groatia466(3.9)OECD average4970.7)OECD average497(0.3)Itarel454(3.7)Starel55Starel555555Grobia459(1.4)Starel5555555555Itarel458(3.7)Starel555555555555Grobia428(3.1)Starel555555	Austria	506	(3.6)	Ireland	493	(2.9)	Portugal	486	(4.4)
Denmark497(2.9)Poland489(4.0)Slovak Republic474(3.1)Portugal494(3.6)Portugal489(3.1)Slovenia471(1.3)Sweden491(2.9)Slovenia487(1.2)Spain466(3.9)Russian Federation489(3.4)Spain475(3.2)Russian Federation466(3.9)Slovak Republic483(3.6)Hungary470(3.9)Israel461(5.1)Poland481(4.4)Israel447(5.6)Chile452(3.6)Slovenia477(4.1)United Arab Emirates434(2.2)Hungary450(4.4)Slovenia476(1.5)Chile432(3.3)Brazil436(4.9)Slovenia476(1.5)Chile432(3.3)Brazil436(4.9)Scrota476(3.9)Cloombia397(3.2)Colombia396(4.0)Hungary459(4.0)OECD average497(0.7)OECD average497(0.6)Itarel454(5.5)Itarel454(5.5)ItarelItarel14ItarelItarel458(3.7)OECD average497(0.7)OECD average497(0.6)Itarel458(3.7)ItarelItarelItarelItarelItarelItarelItarelItarelItarelItarelItarel	Norway	503	(3.3)	Sweden	490	(2.9)	Austria	480	(3.9)
Portugal494(3.6)Portugal489(3.1)Slovenia471(1.3)Sweden491(2.9)Slovenia487(1.2)Spain466(3.9)Russian Federation489(3.4)Spain475(3.2)Russian Federation466(3.9)Slovak Republic483(3.6)Hungary470(3.9)Israel461(5.1)Poland481(4.4)Israel447(5.6)Chile452(3.6)Slovenia476(1.5)Chile432(3.3)Brazil436(4.9)Slovenia476(3.1)Brazil412(4.7)United Arab Emirates437(3.1)Brazil436(4.9)Slovenia476(3.1)Brazil412(4.7)United Arab Emirates436(4.9)(4.1)Slovenia476(3.9)Colombia397(3.2)Colombia396(4.1)Groatia466(3.9)OECD average497(0.7)OECD average497(0.8)Hungary453(3.6)Istantion(4.9)(4.9)Istantion(4.9)(4.9)Groatia454(3.6)Istantion(4.9)(4.9)Istantion(4.9)(4.9)Hungary454(3.6)Istantion(4.9)(4.9)Istantion(4.9)(4.9)(4.9)Groatia454(3.6)IstantionIstantion(4.9)IstantionIstantion </td <td>Ireland</td> <td>498</td> <td>(3.2)</td> <td>Russian Federation</td> <td>489</td> <td>(2.6)</td> <td>Poland</td> <td>477</td> <td>(4.5)</td>	Ireland	498	(3.2)	Russian Federation	489	(2.6)	Poland	477	(4.5)
Sweden491(2.9)Slovenia487(1.2)Spain466(3.9)Russian Federation489(3.4)Spain475(3.2)Russian Federation466(3.9)Slovak Republic483(3.6)Hungary470(3.9)Israel461(5.1)Poland481(4.4)Israel447(5.6)Chile452(3.6)Spain477(4.1)United Arab Emirates434(2.2)Hungary450(4.1)Slovenia476(1.5)Chile432(3.3)Brazil436(4.9)Serbia473(3.1)Brazil411(4.7)United Arab Emirates407(3.3)Croatia466(3.9)Colombia397(3.2)Colombia396(4.0)Hungary459(4.0)OECD average497(0.7)OECD average497(0.7)Itrakey454(5.6)IsraelIsrael454(5.6)IsraelIsrael145IsraelGryprus453(1.4)IsraelIsrael454(5.6)IsraelIsraelIsraelIsrael145IsraelGryprus453(1.4)IsraelIsrael145IsraelIsrae	Denmark	497	(2.9)	Poland	489	(4.0)	Slovak Republic	474	(3.5)
Russian Federation   489   (1)   Spain   475   (3.2)   Russian Federation   461   (5.1)     Slovak Republic   483   (3.6)   Hungary   470   (3.9)   Israel   461   (5.1)     Poland   481   (4.4)   Israel   447   (5.6)   Chile   452   (3.6)     Spain   477   (4.1)   United Arab Emirates   434   (2.2)   Hungary   450   (4.4)     Slovenia   476   (1.5)   Chile   432   (3.3)   Brazil   436   (4.9)     Slovenia   476   (1.5)   Chile   432   (3.3)   Brazil   436   (4.9)     Slovenia   476   (1.5)   Chile   432   (3.3)   Brazil   436   (4.9)     Groatia   466   (3.9)   Colombia   397   (3.2)   Colombia   396   (4.0)     Hungary   459   (4.0)   OECD average   497   (0.7)   OECD average   497	Portugal	494	(3.6)	Portugal	489	(3.1)	Slovenia	471	(1.3)
Slovak Republic   4   Comparison   Comparison<	Sweden	491	(2.9)	Slovenia	487	(1.2)	Spain	466	(3.9)
Poland481(4.4)Israel447(5.6)Chile452(3.5)Spain477(4.1)United Arab Emirates434(2.2)Hungary450(4.4)Sovenia476(1.5)Chile432(3.3)Brazil436(4.9)Serbia473(3.1)Brazil421(4.7)United Arab Emirates407(3.3)Croatia466(3.9)Colombia397(3.2)Colombia396(4.0)Hungary459(4.0)OECD average497(0.7)OECD average497(0.6)Turkey454(4.0)OECD average497(0.7)OECD average497(0.6)Srael454(5.5)OECD average497(0.7)OECD average497(0.6)Gyprus455(1.4)OECD average497(0.7)OECD average497(0.6)Gyprus454(3.7)OECD average497(0.7)OECD average497(0.6)Gyprus455(1.4)OECD average497(0.7)OECD average497(0.7)Malaysia420(3.7)OECD average497(0.7)OECD average497(0.7)Montenegro407(1.2)OECD average497(1.8)OECD average497(1.8)Bulgaria402(3.5)OECD average497(1.8)OECD average497(1.8)Goombia402(3.5)<	Russian Federation	489	(3.4)	Spain	475	(3.2)	Russian Federation	466	(3.9)
Spain477(4.1)United Arab Emirates434(2.2)Hungary450(3.4)Slovenia476(1.5)Chile432(3.3)Brazil436(4.9)Serbia473(3.1)Brazil421(4.7)United Arab Emirates407(3.3)Croatia466(3.9)Colombia397(3.2)Colombia396(4.0)Hungary459(4.0)OECD average497(0.7)OECD average497(0.6)Turkey454(4.0)OECD average497(0.7)OECD average497(0.6)Israel454(5.5)OECD average497(0.7)OECD average497(0.6)Cyprus448(3.7)OECD average497(0.7)OECD average497(0.6)Brazil428(3.7)OECD average497(0.7)OECD average497(0.6)Malaysia422(3.5)OECD average497(0.7)OECD average497(0.6)Montenegro407(1.2)OECD average497(0.7)OECD average497(0.7)Bulgaria402(5.1)OECD averageVVVVVVColombia399(3.5)OECD averageVVVVVVVColombia399(3.5)OECD averageVVVVVVVVVVVV </td <td>Slovak Republic</td> <td>483</td> <td>(3.6)</td> <td>Hungary</td> <td>470</td> <td>(3.9)</td> <td>Israel</td> <td>461</td> <td>(5.1)</td>	Slovak Republic	483	(3.6)	Hungary	470	(3.9)	Israel	461	(5.1)
Slovenia476(1.5)Chile432(3.3)Brazil473(4.6)(4.7)Serbia473(3.1)Brazil421(4.7)United Arab Emirates407(3.3)Croatia466(3.9)Colombia397(3.2)Colombia396(4.0)Hungary454(4.0)OECD average497(0.7)OECD average497(0.7)Irarel454(4.0)Image454(5.5)ImageImageImage1mageChile488(3.7)Image1mage1mageImageImageImageImageGyprus454(1.4)ImageImageImageImageImageImageImageMalaysia428(3.7)ImageImageImageImageImageImageImageMontenegro411(2.8)ImageImageImageImageImageImageImageJurguay403(3.5)ImageImageImageImageImageImageImageBalgaria402(5.1)ImageImageImageImageImageImageImageGoombia399(3.5)ImageImageImageImageImageImageGoombia399(3.5)ImageImageImageImageImageImageGoombia399(3.5)ImageImageImageImageImageImageGoombia<	Poland	481	(4.4)	Israel	447	(5.6)	Chile	452	(3.6)
Serbia473(3.1)Brazil421(4.7)United Arab Emirates407(3.3)Croatia466(3.9)Colombia397(3.2)Colombia396(4.0)Hungary459(4.0)OECD average497(0.7)OECD average497(0.7)Turkey454(4.0)(1.7) </td <td>Spain</td> <td>477</td> <td>(4.1)</td> <td>United Arab Emirates</td> <td>434</td> <td>(2.2)</td> <td>Hungary</td> <td>450</td> <td>(4.4)</td>	Spain	477	(4.1)	United Arab Emirates	434	(2.2)	Hungary	450	(4.4)
Croatia 466 (3.9) Colombia 397 (3.2) Colombia 396 (4.0)   Hungary 459 (4.0) OECD average 497 (0.7) OECD average 497 (0.6)   Turkey 454 (4.0) Israel 454 (5.5) Israel 488 (3.7) Israel 445 (1.4) Israel 445 (1.4) Israel 445 (1.4) Israel 428 (3.7) Israel 428 (4.7) Israel Israel 428 (3.7) Israel Israel 428 (3.5) Israel Israel 428 (3.5) Israel Isr	Slovenia	476	(1.5)	Chile	432	(3.3)	Brazil	436	(4.9)
Hungary 459 (4.0) OECD average 497 (0.7) OECD average 497 (0.6)   Turkey 454 (4.0) OECD average 497 (0.7) OECD average 497 (0.6)   Israel 454 (5.5) OECD average 497 (0.7) OECD average 497 (0.6)   Chile 458 (5.5) OECD average 497 (0.7) OECD average 497 (0.6)   Chile 458 (5.5) OECD average 497 (0.7) OECD average 497 (0.6)   Graverage 454 (5.5) OECD average 497 (0.7) OECD average 497 (0.6)   Chile 458 (5.5) OECD average 497 (0.7) OECD average 497 (0.6)   Gyprus 445 (1.4) (3.7) OECD average 497 (0.7) OECD average 497 (0.7)   Malaysia 411 (2.8) (1.9) (1.9) (1.9) (1.9) (1.9) (1.9) (1.9) (1.9) (1.9) (1.9	Serbia	473	(3.1)	Brazil	421	(4.7)	United Arab Emirates	407	(3.3)
Turkey454(4.0)Israel454(5.5)Chile448(3.7)Cyprus445(1.4)Brazil428(4.7)Malaysia422(3.5)United Arab Emirates411(2.8)Montenegro407(1.2)Uruguay403(3.5)Bulgaria402(5.1)Colombia399(3.5)	Croatia	466	(3.9)	Colombia	397	(3.2)	Colombia	396	(4.0)
Israel454(5.5)Chile448(3.7)Cyprus445(1.4)Brazil428(4.7)Malaysia422(3.5)United Arab Emirates411(2.8)Montenegro407(1.2)Uruguay403(3.5)Bulgaria402(5.1)Colombia399(3.5)	Hungary	459	(4.0)	OECD average	497	(0.7)	OECD average	497	(0.6)
Chile 448 (3.7)   Cyprus 445 (1.4)   Brazil 428 (4.7)   Malaysia 422 (3.5)   United Arab Emirates 411 (2.8)   Montenegro 407 (1.2)   Bulgaria 402 (5.1)   Colombia 399 (3.5)	Turkey	454	(4.0)						
Cyprus 445 (1.4)   Brazil 428 (4.7)   Malaysia 422 (3.5)   United Arab Emirates 411 (2.8)   Montenegro 407 (1.2)   Uruguay 403 (3.5)   Bulgaria 402 (5.1)   Colombia 399 (3.5)	Israel	454	(5.5)						
Brazil4284.7)Malaysia422(3.5)United Arab Emirates411(2.8)Montenegro407(1.2)Uruguay403(3.5)Bulgaria402(5.1)Colombia399(3.5)	Chile	448	(3.7)						
Malaysia 422 (3.5)   United Arab Emirates 411 (2.8)   Montenegro 407 (1.2)   Uruguay 403 (3.5)   Bulgaria 402 (5.1)   Colombia 399 (3.5)	Cyprus	445	(1.4)						
United Arab Emirates 411 (2.8)   Montenegro 407 (1.2)   Uruguay 403 (3.5)   Bulgaria 402 (5.1)   Colombia 399 (3.5)	Brazil	428	(4.7)						
Montenegro 407 (1.2)   Uruguay 403 (3.5)   Bulgaria 402 (5.1)   Colombia 399 (3.5)	Malaysia	422	(3.5)						
Uruguay 403 (3.5)   Bulgaria 402 (5.1)   Colombia 399 (3.5)	United Arab Emirates	411	(2.8)						
Bulgaria   402   (5.1)     Colombia   399   (3.5)	Montenegro	407	(1.2)						
Colombia 399 (3.5)	Uruguay	403	(3.5)						
	Bulgaria	402	(5.1)						
OECD average 500 (0.7)	Colombia	399	(3.5)						
	OECD average	500	(0.7)						

## Table 1. Performance of 15-Year-Old Students in CBA Problem Solving, CBAMathematics and Digital Reading in PISA 2012

Note: Shaded area indicates scores significantly different from those of Hong Kong.



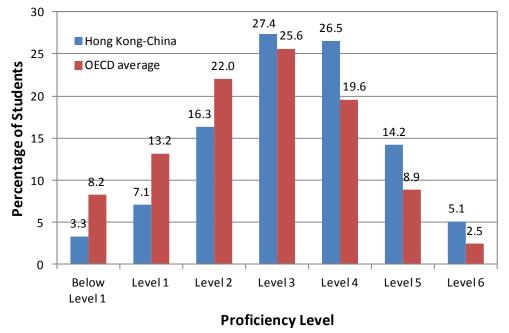
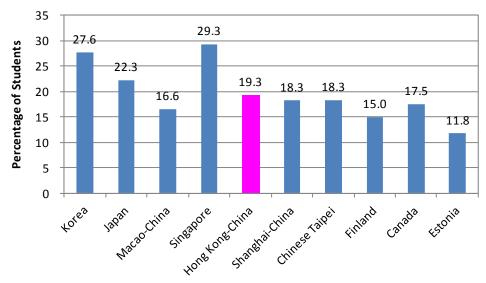
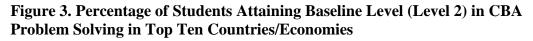


Figure 2. Percentage of Students Attaining Top Levels (Level 5 and Above) in CBA Problem Solving in Top Ten Countries/Economies





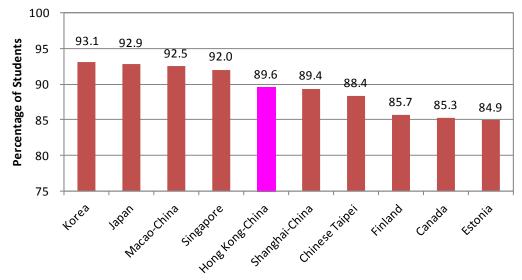
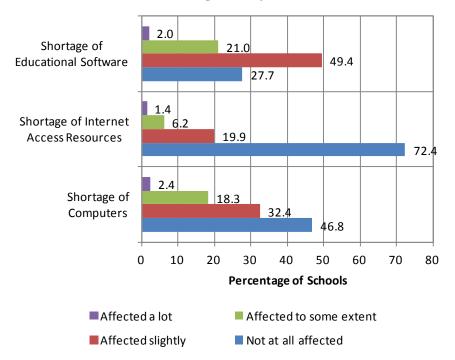
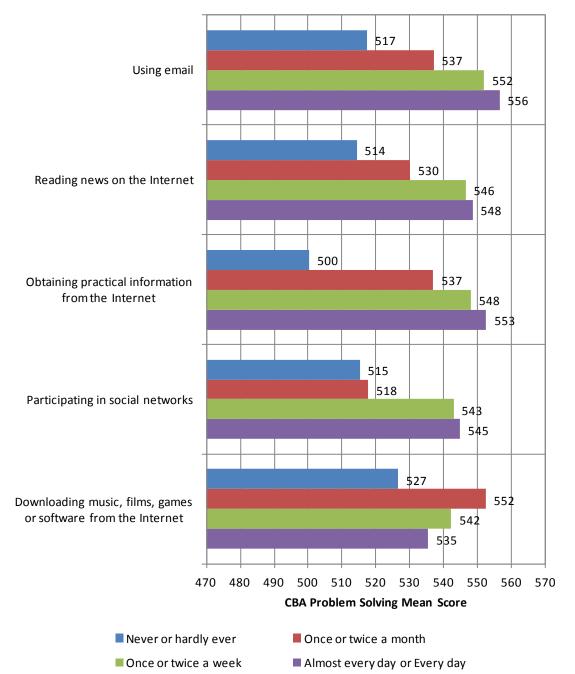
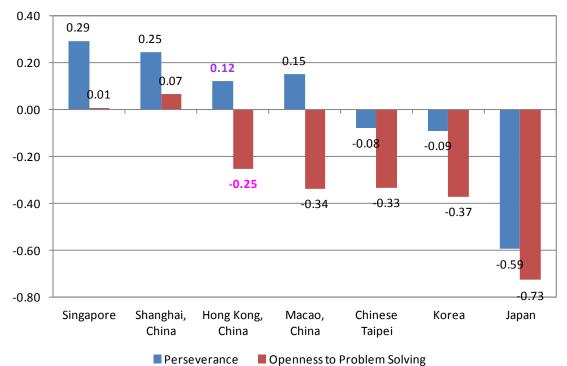


Figure 4. Percentage of Schools Reporting that Shortage of ICT Resources in School Had Affected Teaching Quality (PISA 2012)





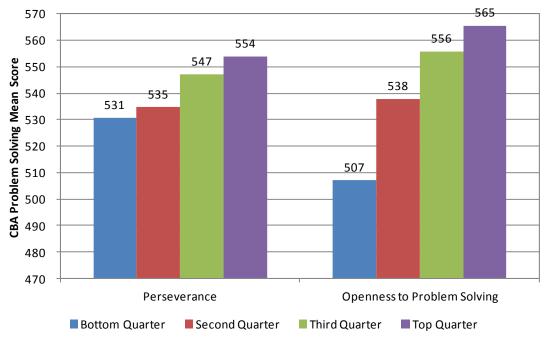
## Figure 5. Relationship between Online Activities and CBA Problem Solving Performance of Hong Kong Students



**Figure 6. Indices of Perseverance and Openness towards Problem Solving of Students in East Asian Societies** 

- Note: 1. The OECD average is 0.00
  - 2. Perseverance refers to working on tasks until everything is perfect, not giving up easily, and doing more than what is expected when confronting with a problem.
  - 3. Openness refers to seeking explanations of things, linking facts together, and not avoiding complexity when confronting with a problem.

Figure 7. Relationship between Perseverance and Openness towards Problem Solving and CBA Problem Solving Performance of Hong Kong Students



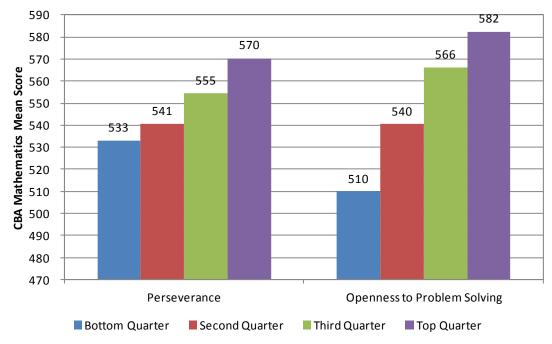


Figure 8. Relationship between Perseverance and Openness towards Problem Solving and CBA Mathematics Performance of Hong Kong Students

Figure 9. Relationship between Perseverance and Openness towards Problem Solving and Digital Reading Performance of Hong Kong Students

