Exhibit M3.4: Achievement in Advanced Mathematics Cognitive Domains by Gender

Knowing			Applying			Reasoning		
Females	Males	T	Females	Males		Females	Males	
527 (10.0)	547 (8.6)	٥	535 (9.4)	552 (7.7)	٥	530 (8.1)	550 (7.1)	٥
540 (7.2)	544 (4.4)		534 (5.1)	527 (4.9)		525 (6.1)	527 (4.2)	
474 (6.1)	502 (7.0)	٥	468 (5.7)	491 (6.6)	٥	468 (5.7)	501 (6.6)	٥
474 (7.3)	482 (7.0)		487 (6.7)	495 (6.4)		478 (5.5)	490 (5.9)	٥
480 (3.4)	479 (3.5)		475 (3.4)	476 (3.3)		485 (4.0)	491 (3.9)	
465 (2.9)	485 (3.3)	٥	434 (3.7)	463 (4.0)	٥	446 (3.6)	477 (3.7)	٥
456 (3.8)	481 (4.9)	٥	455 (3.3)	480 (6.8)	٥	428 (4.9)	464 (5.8)	٥
439 (5.3)	449 (5.2)		456 (6.4)	461 (5.7)		461 (4.9)	473 (5.2)	٥
395 (5.7)	412 (5.3)	٥	429 (4.5)	437 (4.9)		438 (5.5)	453 (4.0)	٥
431 (5.9)	418 (7.0)		431 (6.3)	422 (6.6)		410 (7.2)	412 (7.4)	
461 (1.8)	472 (1.8)	٥	463 (1.7)	472 (1.9)	٥	460 (1.8)	476 (1.8)	٥
	Females 527 (10.0) 540 (7.2) 474 (6.1) 474 (7.3) 480 (3.4) 465 (2.9) 456 (3.8) 439 (5.3) 395 (5.7) 431 (5.9)	Females Males 527 (10.0) 547 (8.6) 540 (7.2) 544 (4.4) 474 (6.1) 502 (7.0) 474 (7.3) 482 (7.0) 480 (3.4) 479 (3.5) 465 (2.9) 485 (3.3) 456 (3.8) 481 (4.9) 439 (5.3) 449 (5.2) 395 (5.7) 412 (5.3) 431 (5.9) 418 (7.0)	Females Males 527 (10.0) 547 (8.6) 540 (7.2) 544 (4.4) 474 (6.1) 502 (7.0) 474 (7.3) 482 (7.0) 480 (3.4) 479 (3.5) 465 (2.9) 485 (3.3) 456 (3.8) 481 (4.9) 439 (5.3) 449 (5.2) 395 (5.7) 412 (5.3) 431 (5.9) 418 (7.0)	Females Males Females 527 (10.0) 547 (8.6) ● 535 (9.4) 540 (7.2) 544 (4.4) 534 (5.1) 474 (6.1) 502 (7.0) ● 468 (5.7) 474 (7.3) 482 (7.0) 487 (6.7) 480 (3.4) 479 (3.5) 475 (3.4) 465 (2.9) 485 (3.3) ● 434 (3.7) 456 (3.8) 481 (4.9) ● 455 (3.3) 439 (5.3) 449 (5.2) 456 (6.4) 395 (5.7) 412 (5.3) ● 429 (4.5) 431 (5.9) 418 (7.0) 431 (6.3)	Females Males Females Males 527 (10.0) 547 (8.6) □ 535 (9.4) 552 (7.7) 540 (7.2) 544 (4.4) 534 (5.1) 527 (4.9) 474 (6.1) 502 (7.0) □ 468 (5.7) 491 (6.6) 474 (7.3) 482 (7.0) 487 (6.7) 495 (6.4) 480 (3.4) 479 (3.5) 475 (3.4) 476 (3.3) 465 (2.9) 485 (3.3) □ 434 (3.7) 463 (4.0) 456 (3.8) 481 (4.9) □ 455 (3.3) 480 (6.8) 439 (5.3) 449 (5.2) 456 (6.4) 461 (5.7) 395 (5.7) 412 (5.3) □ 429 (4.5) 437 (4.9) 431 (5.9) 418 (7.0) 431 (6.3) 422 (6.6)	Females Males Females Males 527 (10.0) 547 (8.6) 535 (9.4) 552 (7.7) 540 (7.2) 544 (4.4) 534 (5.1) 527 (4.9) 474 (6.1) 502 (7.0) 468 (5.7) 491 (6.6) 491 (6.6) 491 (6.6) 492 (6.4) 480 (3.4) 479 (3.5) 475 (3.4) 476 (3.3) 476 (3.3) 475 (3.4) 476 (3.3)	Females Males Females Males Females 527 (10.0) 547 (8.6) 535 (9.4) 552 (7.7) 530 (8.1) 540 (7.2) 544 (4.4) 534 (5.1) 527 (4.9) 525 (6.1) 474 (6.1) 502 (7.0) 468 (5.7) 491 (6.6) 468 (5.7) 474 (7.3) 482 (7.0) 487 (6.7) 495 (6.4) 478 (5.5) 480 (3.4) 479 (3.5) 475 (3.4) 476 (3.3) 485 (4.0) 465 (2.9) 485 (3.3) 434 (3.7) 463 (4.0) 446 (3.6) 456 (3.8) 481 (4.9) 455 (3.3) 480 (6.8) 428 (4.9) 439 (5.3) 449 (5.2) 456 (6.4) 461 (5.7) 461 (4.9) 395 (5.7) 412 (5.3) 429 (4.5) 437 (4.9) 438 (5.5) 431 (5.9) 418 (7.0) 431 (6.3) 422 (6.6) 410 (7.2)	Females Males Females Males Females Males 527 (10.0) 547 (8.6) 535 (9.4) 552 (7.7) 530 (8.1) 550 (7.1) 540 (7.2) 544 (4.4) 534 (5.1) 527 (4.9) 525 (6.1) 527 (4.2) 474 (6.1) 502 (7.0) 468 (5.7) 491 (6.6) 468 (5.7) 501 (6.6) 474 (7.3) 482 (7.0) 487 (6.7) 495 (6.4) 478 (5.5) 490 (5.9) 480 (3.4) 479 (3.5) 475 (3.4) 476 (3.3) 485 (4.0) 491 (3.9) 465 (2.9) 485 (3.3) 434 (3.7) 463 (4.0) 446 (3.6) 477 (3.7) 456 (3.8) 481 (4.9) 455 (3.3) 480 (6.8) 428 (4.9) 464 (5.8) 439 (5.3) 449 (5.2) 456 (6.4) 461 (5.7) 461 (4.9) 473 (5.2) 395 (5.7) 412 (5.3) 429 (4.5) 437 (4.9) 438 (5.5) 453 (4.0) 431 (5.9) 418 (7.0) 431 (6.3) 422 (6.6) 410 (7.2) 412 (7.4)

The Russian Federation 6hr+ results are for a subset of the Russian Federation students. This subset of students are in an Intensive stream that have at least 6 hours of mathematics

See Appendix MC.5 for sampling guidelines and sampling participation notes †, ‡, and ‡.

() Standard errors appear in parentheses. Because of rounding some results may appear inconsistent.

