

**Appendix E.3: Average Percent Correct in the Mathematics Content and Cognitive Domains**

| Country                 | Overall Mathematics | Mathematics Content Domains |          |          |                 | Mathematics Cognitive Domains |          |           |
|-------------------------|---------------------|-----------------------------|----------|----------|-----------------|-------------------------------|----------|-----------|
|                         |                     | Number                      | Algebra  | Geometry | Data and Chance | Knowing                       | Applying | Reasoning |
| Australia               | 45 (0.7)            | 51 (0.8)                    | 35 (0.7) | 40 (0.8) | 55 (0.7)        | 54 (0.7)                      | 43 (0.7) | 36 (0.8)  |
| Bahrain                 | 35 (0.3)            | 33 (0.4)                    | 36 (0.4) | 31 (0.4) | 42 (0.4)        | 47 (0.4)                      | 32 (0.3) | 25 (0.5)  |
| ψ Botswana (9)          | 23 (0.3)            | 25 (0.4)                    | 20 (0.3) | 20 (0.3) | 28 (0.3)        | 32 (0.3)                      | 21 (0.3) | 15 (0.2)  |
| Canada                  | 50 (0.6)            | 57 (0.7)                    | 40 (0.6) | 46 (0.6) | 58 (0.6)        | 58 (0.6)                      | 49 (0.6) | 41 (0.6)  |
| ψ Chile                 | 28 (0.5)            | 30 (0.6)                    | 22 (0.5) | 26 (0.5) | 37 (0.6)        | 36 (0.6)                      | 27 (0.5) | 21 (0.5)  |
| Chinese Taipei          | 68 (0.5)            | 69 (0.6)                    | 67 (0.7) | 65 (0.6) | 69 (0.5)        | 74 (0.6)                      | 68 (0.6) | 60 (0.6)  |
| ψ Egypt                 | 25 (0.5)            | 26 (0.6)                    | 25 (0.7) | 22 (0.6) | 26 (0.5)        | 36 (0.7)                      | 22 (0.5) | 15 (0.5)  |
| England                 | 48 (1.1)            | 54 (1.3)                    | 37 (1.1) | 43 (1.1) | 60 (1.1)        | 56 (1.1)                      | 47 (1.2) | 39 (1.1)  |
| Georgia                 | 34 (0.7)            | 37 (0.8)                    | 33 (0.9) | 29 (0.7) | 36 (0.6)        | 45 (0.9)                      | 32 (0.7) | 23 (0.7)  |
| Hong Kong SAR           | 68 (1.1)            | 72 (1.1)                    | 62 (1.2) | 64 (1.1) | 72 (1.0)        | 76 (1.0)                      | 67 (1.1) | 57 (1.3)  |
| Hungary                 | 48 (0.9)            | 52 (1.0)                    | 41 (1.0) | 45 (1.0) | 55 (0.8)        | 56 (0.9)                      | 47 (1.0) | 38 (1.0)  |
| ψ Iran, Islamic Rep. of | 31 (0.9)            | 32 (1.0)                    | 28 (0.9) | 30 (0.9) | 36 (0.9)        | 40 (1.0)                      | 29 (0.9) | 23 (0.9)  |
| Ireland                 | 49 (0.7)            | 60 (0.8)                    | 39 (0.7) | 40 (0.7) | 58 (0.7)        | 61 (0.7)                      | 48 (0.7) | 38 (0.7)  |
| Israel                  | 47 (0.9)            | 52 (1.0)                    | 45 (1.0) | 39 (0.9) | 52 (0.9)        | 57 (1.0)                      | 46 (1.0) | 37 (0.9)  |
| Italy                   | 42 (0.6)            | 45 (0.7)                    | 33 (0.7) | 41 (0.7) | 49 (0.6)        | 50 (0.6)                      | 41 (0.7) | 33 (0.7)  |
| Japan                   | 65 (0.5)            | 66 (0.5)                    | 62 (0.7) | 64 (0.6) | 71 (0.5)        | 71 (0.5)                      | 65 (0.5) | 57 (0.6)  |
| ✕ Jordan                | 23 (0.4)            | 22 (0.5)                    | 24 (0.6) | 21 (0.4) | 26 (0.4)        | 32 (0.6)                      | 21 (0.4) | 15 (0.3)  |
| Kazakhstan              | 50 (1.4)            | 51 (1.4)                    | 53 (1.5) | 47 (1.5) | 48 (1.2)        | 61 (1.3)                      | 49 (1.5) | 39 (1.4)  |
| Korea, Rep. of          | 69 (0.6)            | 72 (0.6)                    | 67 (0.7) | 67 (0.7) | 72 (0.5)        | 76 (0.5)                      | 69 (0.6) | 61 (0.7)  |
| ψ Kuwait                | 24 (0.8)            | 25 (1.0)                    | 21 (0.8) | 21 (0.7) | 30 (0.9)        | 33 (1.0)                      | 22 (0.9) | 14 (0.7)  |
| Lebanon                 | 30 (0.7)            | 32 (0.8)                    | 31 (0.8) | 28 (0.8) | 29 (0.7)        | 44 (0.9)                      | 27 (0.7) | 17 (0.6)  |
| Lithuania               | 46 (0.7)            | 50 (0.7)                    | 38 (0.8) | 43 (0.7) | 55 (0.6)        | 54 (0.7)                      | 47 (0.7) | 34 (0.7)  |
| Malaysia                | 36 (0.8)            | 41 (0.9)                    | 31 (0.7) | 32 (0.7) | 41 (0.8)        | 48 (0.9)                      | 34 (0.8) | 25 (0.6)  |
| Malta                   | 43 (0.3)            | 48 (0.4)                    | 38 (0.4) | 37 (0.4) | 49 (0.4)        | 54 (0.3)                      | 41 (0.4) | 31 (0.4)  |
| ✕ Morocco               | 22 (0.3)            | 22 (0.3)                    | 19 (0.3) | 23 (0.3) | 25 (0.3)        | 30 (0.4)                      | 20 (0.3) | 14 (0.2)  |
| New Zealand             | 42 (0.8)            | 47 (0.9)                    | 33 (0.8) | 37 (0.7) | 53 (0.8)        | 50 (0.8)                      | 41 (0.8) | 34 (0.8)  |
| Norway (9)              | 46 (0.6)            | 55 (0.7)                    | 31 (0.5) | 39 (0.6) | 61 (0.7)        | 53 (0.6)                      | 46 (0.6) | 36 (0.6)  |
| ψ Oman                  | 26 (0.4)            | 25 (0.4)                    | 26 (0.4) | 25 (0.4) | 30 (0.4)        | 35 (0.5)                      | 24 (0.4) | 18 (0.3)  |
| ψ Qatar                 | 32 (0.5)            | 34 (0.7)                    | 30 (0.6) | 28 (0.5) | 37 (0.5)        | 42 (0.6)                      | 30 (0.6) | 22 (0.5)  |
| Russian Federation      | 53 (1.3)            | 56 (1.3)                    | 53 (1.4) | 49 (1.4) | 52 (1.1)        | 63 (1.3)                      | 52 (1.3) | 40 (1.3)  |
| ✕ Saudi Arabia          | 21 (0.6)            | 19 (0.6)                    | 20 (0.6) | 18 (0.5) | 28 (0.6)        | 28 (0.7)                      | 19 (0.5) | 14 (0.5)  |
| Singapore               | 74 (0.8)            | 80 (0.8)                    | 70 (0.9) | 68 (0.8) | 75 (0.7)        | 82 (0.7)                      | 73 (0.8) | 64 (1.0)  |
| Slovenia                | 47 (0.5)            | 53 (0.6)                    | 36 (0.5) | 45 (0.6) | 56 (0.6)        | 58 (0.6)                      | 45 (0.5) | 37 (0.6)  |
| ✕ South Africa (9)      | 21 (0.7)            | 21 (0.8)                    | 20 (0.7) | 19 (0.5) | 26 (0.7)        | 30 (0.9)                      | 19 (0.6) | 15 (0.5)  |
| Sweden                  | 43 (0.7)            | 50 (0.8)                    | 34 (0.8) | 35 (0.6) | 53 (0.8)        | 49 (0.7)                      | 43 (0.7) | 35 (0.7)  |
| Thailand                | 30 (1.0)            | 32 (1.1)                    | 25 (1.0) | 27 (0.9) | 36 (0.9)        | 37 (1.1)                      | 28 (1.0) | 22 (0.9)  |
| Turkey                  | 36 (1.0)            | 36 (1.1)                    | 32 (1.0) | 34 (1.0) | 45 (1.0)        | 43 (1.0)                      | 35 (1.0) | 30 (1.0)  |
| United Arab Emirates    | 37 (0.4)            | 39 (0.5)                    | 36 (0.4) | 31 (0.4) | 42 (0.5)        | 49 (0.5)                      | 34 (0.4) | 27 (0.4)  |
| United States           | 48 (0.8)            | 53 (0.9)                    | 45 (0.8) | 40 (0.8) | 56 (0.8)        | 60 (0.8)                      | 46 (0.8) | 37 (0.8)  |
| International Avg.      | 41 (0.1)            | 44 (0.1)                    | 37 (0.1) | 37 (0.1) | 47 (0.1)        | 50 (0.1)                      | 40 (0.1) | 32 (0.1)  |

SOURCE: IEA's Trends in International Mathematics and Science Study – TIMSS 2015

**Benchmarking Participants**

|                           |          |          |          |          |          |          |          |          |
|---------------------------|----------|----------|----------|----------|----------|----------|----------|----------|
| ✕ Buenos Aires, Argentina | 23 (0.7) | 28 (0.8) | 17 (0.6) | 18 (0.6) | 28 (0.8) | 31 (0.8) | 21 (0.7) | 15 (0.5) |
| Ontario, Canada           | 49 (0.8) | 55 (0.9) | 38 (0.9) | 45 (0.7) | 58 (0.8) | 56 (0.8) | 47 (0.7) | 41 (0.9) |
| Quebec, Canada            | 54 (1.0) | 63 (1.2) | 45 (0.9) | 49 (1.1) | 60 (1.2) | 63 (1.0) | 54 (1.1) | 42 (1.1) |
| Norway (8)                | 39 (0.5) | 48 (0.6) | 23 (0.5) | 34 (0.5) | 55 (0.7) | 46 (0.5) | 39 (0.5) | 30 (0.5) |
| Abu Dhabi, UAE            | 32 (0.9) | 34 (1.0) | 31 (0.9) | 27 (0.9) | 37 (1.0) | 44 (0.9) | 29 (1.0) | 23 (0.9) |
| Dubai, UAE                | 47 (0.5) | 50 (0.6) | 46 (0.5) | 40 (0.6) | 52 (0.5) | 59 (0.5) | 44 (0.6) | 37 (0.6) |
| Florida, US               | 43 (1.5) | 47 (1.8) | 40 (1.6) | 34 (1.3) | 48 (1.6) | 54 (1.7) | 40 (1.6) | 32 (1.3) |

✕ Reservations about reliability because the percentage of students with achievement too low for estimation exceeds 25%.

ψ Reservations about reliability because the percentage of students with achievement too low for estimation exceeds 15% but does not exceed 25%.

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