

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

| eTIMSS | | Mathematics Content Domains | | | | Mathematics Cognitive Domains | | |
|----------------------------------|---------------------|-----------------------------|-----------------|-----------------|----------------------|-------------------------------|-----------------|-----------------|
| Country | Overall Mathematics | Number | Algebra | Geometry | Data and Probability | Knowing | Applying | Reasoning |
| Ψ Chile | 25 (0.5) | 28 (0.6) | 23 (0.5) | 21 (0.5) | 27 (0.6) | 31 (0.6) | 24 (0.5) | 18 (0.5) |
| Chinese Taipei | 66 (0.6) | 70 (0.6) | 66 (0.6) | 64 (0.6) | 64 (0.6) | 72 (0.5) | 66 (0.6) | 60 (0.6) |
| England | 42 (1.3) | 46 (1.3) | 37 (1.3) | 36 (1.2) | 48 (1.4) | 47 (1.2) | 43 (1.3) | 32 (1.3) |
| Finland | 39 (0.6) | 45 (0.7) | 33 (0.6) | 36 (0.6) | 45 (0.7) | 45 (0.6) | 40 (0.6) | 30 (0.6) |
| France | 33 (0.5) | 35 (0.6) | 27 (0.6) | 31 (0.6) | 40 (0.6) | 38 (0.6) | 33 (0.5) | 24 (0.5) |
| Georgia | 30 (0.9) | 35 (1.1) | 31 (1.0) | 24 (0.8) | 28 (0.8) | 37 (1.0) | 29 (0.9) | 21 (0.9) |
| Hong Kong SAR | 58 (1.0) | 61 (0.9) | 58 (0.9) | 57 (1.0) | 56 (1.2) | 65 (0.9) | 58 (1.0) | 50 (1.0) |
| Hungary | 42 (0.7) | 46 (0.8) | 38 (0.7) | 39 (0.8) | 47 (0.7) | 49 (0.8) | 43 (0.7) | 32 (0.7) |
| Israel | 44 (1.1) | 47 (1.1) | 45 (1.2) | 36 (1.0) | 45 (1.1) | 51 (1.1) | 44 (1.1) | 36 (1.1) |
| Italy | 37 (0.6) | 40 (0.7) | 32 (0.6) | 35 (0.7) | 39 (0.7) | 43 (0.7) | 36 (0.6) | 29 (0.5) |
| Korea, Rep. of | 65 (0.6) | 68 (0.6) | 63 (0.7) | 62 (0.6) | 65 (0.6) | 72 (0.6) | 65 (0.6) | 57 (0.7) |
| Lithuania | 43 (0.7) | 45 (0.8) | 40 (0.8) | 40 (0.7) | 46 (0.8) | 49 (0.7) | 44 (0.8) | 32 (0.7) |
| Malaysia | 30 (0.6) | 33 (0.6) | 28 (0.6) | 28 (0.5) | 33 (0.6) | 36 (0.6) | 31 (0.6) | 22 (0.5) |
| Norway (9) | 38 (0.5) | 43 (0.6) | 31 (0.6) | 33 (0.5) | 46 (0.8) | 44 (0.5) | 39 (0.6) | 28 (0.5) |
| Portugal | 37 (0.7) | 40 (0.7) | 35 (0.8) | 34 (0.7) | 40 (0.8) | 45 (0.8) | 37 (0.7) | 29 (0.6) |
| Ψ Qatar | 28 (0.8) | 30 (0.9) | 28 (0.8) | 22 (0.8) | 28 (1.0) | 35 (1.0) | 27 (0.9) | 20 (0.8) |
| Russian Federation | 49 (1.2) | 53 (1.2) | 51 (1.3) | 43 (1.3) | 45 (1.1) | 57 (1.3) | 49 (1.2) | 36 (1.2) |
| Singapore | 68 (1.1) | 71 (1.1) | 67 (1.2) | 63 (1.1) | 70 (1.0) | 73 (1.0) | 68 (1.1) | 61 (1.2) |
| Sweden | 38 (0.6) | 42 (0.6) | 34 (0.6) | 32 (0.6) | 46 (0.8) | 43 (0.6) | 38 (0.7) | 32 (0.7) |
| Turkey | 39 (0.9) | 41 (1.0) | 38 (1.0) | 33 (0.8) | 43 (0.9) | 47 (1.0) | 37 (0.9) | 31 (0.9) |
| United Arab Emirates | 34 (0.4) | 37 (0.4) | 35 (0.5) | 28 (0.4) | 34 (0.3) | 42 (0.4) | 33 (0.4) | 26 (0.4) |
| United States | 43 (1.1) | 47 (1.1) | 44 (1.2) | 35 (0.9) | 45 (1.1) | 52 (1.1) | 43 (1.1) | 32 (1.0) |
| International Average | 42 (0.2) | 46 (0.2) | 40 (0.2) | 38 (0.2) | 45 (0.2) | 49 (0.2) | 42 (0.2) | 33 (0.2) |
| Benchmarking Participants | | | | | | | | |
| Ontario, Canada | 45 (1.2) | 49 (1.2) | 38 (1.3) | 42 (1.1) | 52 (1.3) | 49 (1.1) | 45 (1.3) | 38 1.1 |
| Quebec, Canada | 48 (1.0) | 53 (1.1) | 42 (1.0) | 44 (1.1) | 54 (1.0) | 56 (0.9) | 49 (1.1) | 37 (1.1) |
| Moscow City, Russian Fed. | 57 (1.1) | 61 (1.1) | 60 (1.2) | 49 (1.1) | 58 (1.0) | 67 (1.0) | 57 (1.2) | 45 (1.2) |
| Ψ Abu Dhabi, UAE | 27 (0.5) | 30 (0.5) | 28 (0.6) | 22 (0.5) | 27 (0.5) | 35 (0.6) | 26 (0.5) | 20 (0.4) |
| Dubai, UAE | 48 (0.5) | 52 (0.6) | 49 (0.6) | 41 (0.5) | 49 (0.5) | 56 (0.6) | 47 (0.5) | 39 (0.5) |

| paperTIMSS | | Mathematics Content Domains | | | | Mathematics Cognitive Domains | | |
|----------------------------------|---------------------|-----------------------------|-----------------|-----------------|----------------------|-------------------------------|-----------------|-----------------|
| Country | Overall Mathematics | Number | Algebra | Geometry | Data and Probability | Knowing | Applying | Reasoning |
| Australia | 45 (1.0) | 50 (1.0) | 40 (1.1) | 39 (1.0) | 53 (0.9) | 51 (1.0) | 46 (1.0) | 36 (1.1) |
| Bahrain | 38 (0.4) | 40 (0.5) | 38 (0.4) | 36 (0.5) | 38 (0.4) | 44 (0.5) | 38 (0.4) | 32 (0.5) |
| Cyprus | 41 (0.4) | 45 (0.5) | 44 (0.5) | 33 (0.5) | 42 (0.5) | 52 (0.5) | 39 (0.4) | 32 (0.4) |
| Ψ Egypt | 25 (0.9) | 29 (1.0) | 26 (1.0) | 21 (0.8) | 22 (0.8) | 34 (1.0) | 23 (0.8) | 18 (0.8) |
| Iran, Islamic Rep. of | 30 (0.8) | 33 (0.9) | 30 (0.8) | 26 (0.8) | 31 (0.8) | 38 (0.9) | 29 (0.8) | 24 (0.8) |
| Ireland | 47 (0.7) | 56 (0.7) | 40 (0.7) | 36 (0.6) | 55 (0.8) | 56 (0.7) | 47 (0.7) | 33 (0.7) |
| Japan | 65 (0.6) | 64 (0.7) | 65 (0.6) | 64 (0.7) | 69 (0.5) | 69 (0.6) | 67 (0.6) | 58 (0.7) |
| Ψ Jordan | 25 (0.7) | 26 (0.8) | 29 (1.0) | 20 (0.6) | 24 (0.6) | 33 (1.0) | 23 (0.7) | 19 (0.6) |
| Kazakhstan | 38 (0.9) | 41 (0.9) | 42 (1.1) | 32 (0.8) | 36 (0.7) | 47 (1.0) | 37 (0.9) | 29 (0.8) |
| Ψ Kuwait | 23 (0.8) | 26 (0.9) | 22 (0.8) | 19 (0.8) | 23 (0.8) | 30 (1.0) | 21 (0.8) | 16 (0.7) |
| Lebanon | 26 (0.5) | 30 (0.6) | 29 (0.6) | 20 (0.5) | 20 (0.6) | 40 (0.6) | 22 (0.5) | 15 (0.5) |
| Ψ Morocco | 19 (0.4) | 21 (0.4) | 18 (0.5) | 19 (0.4) | 18 (0.3) | 26 (0.5) | 18 (0.3) | 12 (0.4) |
| New Zealand | 37 (0.7) | 41 (0.8) | 32 (0.7) | 31 (0.6) | 44 (0.8) | 41 (0.7) | 38 (0.7) | 29 (0.6) |
| Ψ Oman | 25 (0.4) | 25 (0.4) | 27 (0.5) | 22 (0.4) | 24 (0.5) | 32 (0.5) | 23 (0.4) | 18 (0.4) |
| Romania | 37 (1.0) | 41 (1.1) | 40 (1.1) | 31 (1.0) | 35 (0.9) | 47 (1.1) | 35 (1.0) | 29 (1.0) |
| Ψ Saudi Arabia | 21 (0.3) | 22 (0.3) | 21 (0.4) | 16 (0.3) | 24 (0.3) | 27 (0.3) | 20 (0.3) | 14 (0.3) |
| * South Africa (9) | 19 (0.3) | 22 (0.3) | 21 (0.4) | 15 (0.2) | 19 (0.3) | 26 (0.4) | 18 (0.3) | 13 (0.2) |
| International Average | 33 (0.2) | 36 (0.2) | 33 (0.2) | 28 (0.2) | 34 (0.2) | 41 (0.2) | 32 (0.2) | 25 (0.2) |
| Benchmarking Participants | | | | | | | | |
| Ψ Gauteng, RSA (9) | 24 (0.6) | 27 (0.6) | 25 (0.6) | 18 (0.5) | 23 (0.6) | 31 (0.7) | 23 (0.6) | 17 (0.5) |
| Ψ Western Cape, RSA (9) | 28 (1.0) | 32 (1.1) | 30 (1.1) | 22 (0.9) | 28 (1.0) | 36 (1.1) | 28 (1.0) | 21 (0.9) |

Ψ Reservations about reliability because the percentage of students with achievement too low for estimation exceeds 15% but does not exceed 25%.
 * Reservations about reliability because the percentage of students with achievement too low for estimation exceeds 25%.
 () Standard errors appear in parentheses. Because of rounding some results may appear inconsistent.