MATHEMATICS-FOURTH GRADE

International Mathematics Achievement

East Asian Countries Top Achievers at Fourth Grade in Mathematics

TIMSS 2015 Mathematics has achievement results for 49 countries at the fourth grade.



Singapore **618** Hong Kong SAR **615** Korea 608 Chinese Taipei 😏 Japan 😏

> The gap between the East Asian countries and the next highest country was 23 in 2015, unchanged from 2011.

ΓIMSS

Northern Ireland 570 Russian Federation 564 Norway 549 Ireland 547 England 546 Belgium-Flemish 546 Kazakhstan 544 Portugal 541 United States 539 Denmark 539 Lithuania 555 Finland 555 Poland 555 Netherlands 530 Hungary 529 Czech Republic 528 Bulgaria 524 Cyprus 523 Germany 522 Slovenia 520 Sweden 🕦 Serbia 🕦 Australia 🗊 Canada 🚮 Italy 🗊 Spain 505 Croatia 502 Slovak Republic 498 New Zealand 491 France 488 Turkey 483 Georgia 463 Chile 459 United Arab Emirates 452 Bahrain 451 Qatar 439 Iran 431 Oman 425 Indonesia 397 Jordan 388 Saudi Arabia 383 Morocco 377 South Africa 376 Kuwait 353

Please see Exhibit 1.3 for statistically significant differences.

Trends at Fourth Grade Show Increases in Mathematics Achievement Around the World

Trends 2011-2015: 41 Countries

21 Countries Higher Average Achievement



Bahrain, Chinese Taipei, Croatia, Czech Republic, Georgia, Hong Kong SAR, Hungary, Ireland, Japan, Kazakhstan, Morocco, Oman, Portugal, Qatar, Russian Federation, Singapore, Slovenia, Spain, Sweden, Turkey, **United Arab Emirates**

15 Countries Same Average Achievement

Australia, Belgium (Flemish), Chile, Denmark, England, Iran, Italy, Korea, Lithuania, New Zealand, Northern Ireland, Norway, Serbia, Slovak Republic, the United States

5 Countries Lower Average Achievement

Finland, Germany, Kuwait, Netherlands, Saudi Arabia

Trends 1995-2015: 17 Countries













Higher Average Achievement

Australia, Cyprus, England,

Hong Kong SAR, Iran, Ireland,

Japan, Korea, New Zealand, Norway, Portugal, Singapore, Slovenia, the United States

Hungary

Achievement Czech Republic,

Netherlands

In TIMSS 2015 Boys Had Higher Mathematics Achievement in More Countries Than Girls.

Of the 49 TIMSS 2015 Countries:

- Boys had higher achievement in 18 countries, with an average difference of 9 points.
- Girls had higher achievement in 8 countries, with an average difference of 18 points.
- 23 countries had no difference between boys and girls in average mathematics achievement.



Mathematics Achievement Trends by Gender Show Little Change

Trends 2011-2015: 41 Countries

- In both assessments boys had higher achievement in 11 countries, compared to **2** for girls.
- 16 countries had no difference in average mathematics achievement between boys and girls.

SOURCE: IEA's Trends in International Mathematics and Science Study – TIMSS 2015. http://timss2015.org/download-center/

Trends 1995-2015: 17 Countries

- In 1995, boys had higher achievement in **7** countries, with an average achievement advantage of 8 points.
- In 2015, boys had higher achievement in 9 countries, with an average achievement advantage of 8 points.

