

# Mapping State Proficiency Standards Onto the NAEP Scales: Variation and Change in State Standards for Reading and Mathematics, 2005-2009

## INDIANA

### Reading

How do Indiana's reading standards for proficient performance at grades 4 and 8 in 2009 map onto the NAEP scale?

	NAEP scale equivalent	NAEP achievement level
Grade 4	203	below <i>Basic</i>
Grade 8	255	<i>Basic</i>

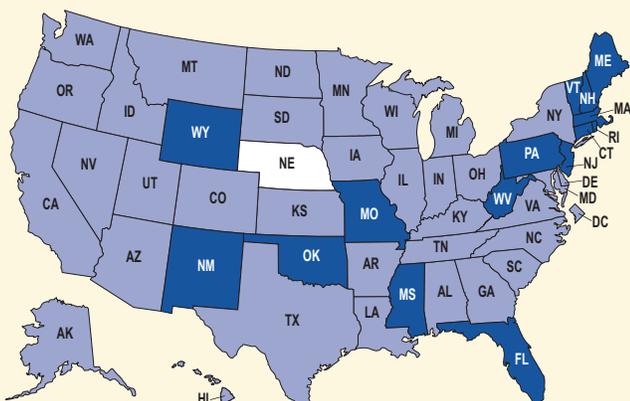
How do Indiana's reading standards for proficient performance at grades 4 and 8 in 2005 and 2007 map onto the NAEP scale?

	2005 NAEP scale equivalent	2005 NAEP achievement level	2007 NAEP scale equivalent	2007 NAEP achievement level
Grade 4	199	below <i>Basic</i>	199	below <i>Basic</i>
Grade 8	249	<i>Basic</i>	251	<i>Basic</i>

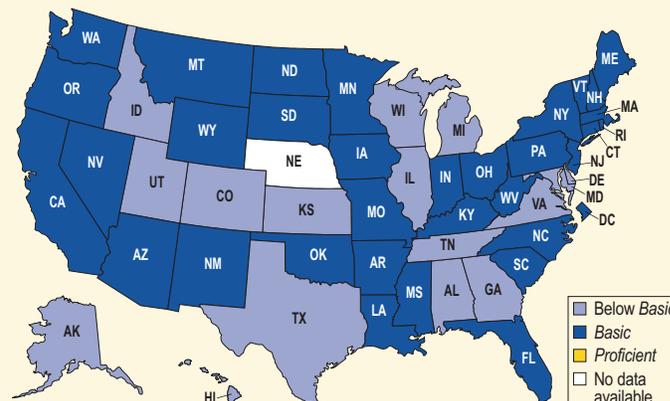
How do Indiana's reading standards for proficient performance at grades 4 and 8 in 2009 compare with those of other states when expressed in terms of NAEP achievement levels?

	States below <i>Basic</i>	States at <i>Basic</i>	States at <i>Proficient</i>
Grade 4	35	15	0

	States below <i>Basic</i>	States at <i>Basic</i>	States at <i>Proficient</i>
Grade 8	16	34	0



Indiana



■ Below *Basic*  
■ *Basic*  
■ *Proficient*  
 No data available

How do Indiana's NAEP scale equivalent scores of reading standards for proficient performance at grades 4 and 8 in 2009 compare with those estimated for 2005 and 2007?

#### Changes from 2007

	2009	2007	Change from 2007	Comparable to 2007
Grade 4	203	199	4.0 *	No
Grade 8	255	251	4.1 *	No

#### Changes from 2005

	2009	2005	Change from 2005	Comparable to 2005
Grade 4	203	199	4.5 *	No
Grade 8	255	249	5.4 *	No

Indiana made substantive changes to its reading assessments between 2007 and 2009, and the NAEP scale equivalent of its standards at both grades increased.

Indiana made substantive changes to its reading assessments between 2005 and 2009, and the NAEP scale equivalent of its standards at both grades increased.

\* Statistically different from zero ( $p < .05$ ).

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2005, 2007, and 2009 Reading Assessments. U.S. Department of Education, Office of Planning, Evaluation and Policy Development, EDFacts SY 2008–09, Washington, DC, 2010. U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2007 and 2009 Surveys of State Assessment Program Characteristics. The National Longitudinal School-Level State Assessment Score Database (NLSLSASD) 2010.

## Reading

Do NAEP and the Indiana reading assessments show the same changes in the proportion of students meeting the state proficiency standards from 2007 to 2009?

Because Indiana made substantive changes to its reading assessments between 2007 and 2009, meaningful comparisons between measures of change in achievement cannot be made.

### Changes to Indiana's reading assessments between 2007 and 2009

	No significant changes	Changed cut scores	Changed the period of administration	Changed assessment items	Used entirely different assessment	Realigned to new content standards	Changed proficiency standards	Changed accommodation policy	Changed re-test policy	Changed test contractors	Other changes
Grade 4		Yes	Yes								
Grade 8		Yes	Yes								

### Composition of Indiana's main reading test in 2008-09

	Multiple choice		Short constructed response		Extended constructed response		Performance tasks		Other	
	Number of items	Proportion of score	Number of items	Proportion of score	Number of items	Proportion of score	Number of items	Proportion of score	Number of items	Proportion of score
Grade 4	35	80%	3	20%	0	0%	0	0%	0	0%
Grade 8	36	80%	3	20%	0	0%	0	0%	0	0%

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2005, 2007, and 2009 Reading Assessments. U.S. Department of Education, Office of Planning, Evaluation and Policy Development, EDFacts SY 2008-09, Washington, DC, 2010. U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2007 and 2009 Surveys of State Assessment Program Characteristics. The National Longitudinal School-Level State Assessment Score Database (NLSLSASD) 2010.

## Mathematics

How do Indiana's mathematics standards for proficient performance at grades 4 and 8 in 2009 map onto the NAEP scale?

	NAEP scale equivalent	NAEP achievement level
Grade 4	229	Basic
Grade 8	273	Basic

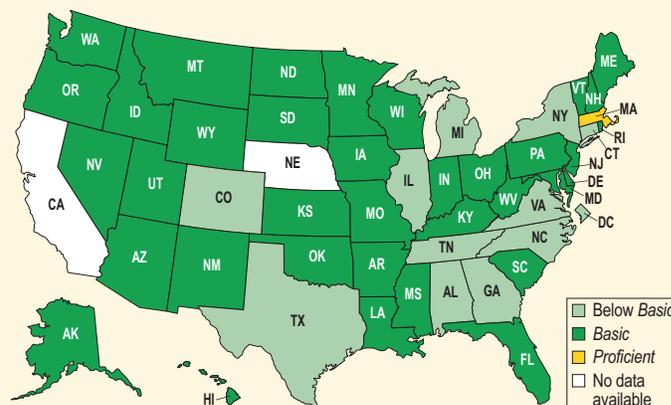
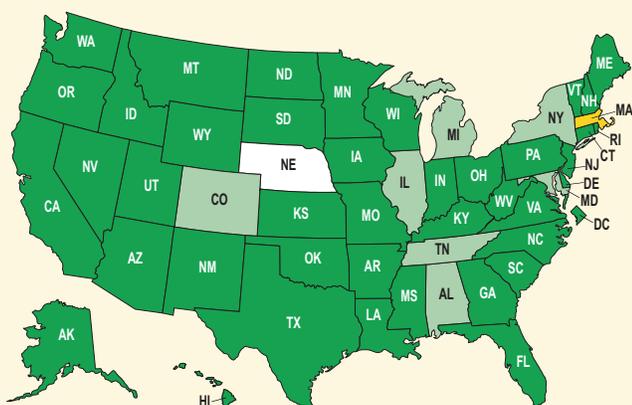
How do Indiana's mathematics standards for proficient performance at grades 4 and 8 in 2005 and 2007 map onto the NAEP scale?

	2005 NAEP scale equivalent	2005 NAEP achievement level	2007 NAEP scale equivalent	2007 NAEP achievement level
Grade 4	225	Basic	228	Basic
Grade 8	266	Basic	266	Basic

How do Indiana's mathematics standards for proficient performance at grades 4 and 8 in 2009 compare with those of other states when expressed in terms of NAEP achievement levels?

	States below Basic	States at Basic	States at Proficient
Grade 4	7	42	1

	States below Basic	States at Basic	States at Proficient
Grade 8	12	36	1



How do Indiana's NAEP scale equivalent scores of mathematics standards for proficient performance at grades 4 and 8 in 2009 compare with those estimated for 2005 and 2007?

### Changes from 2007

	2009	2007	Change from 2007	Comparable to 2007
Grade 4	229	228	1.6	No
Grade 8	273	266	6.7*	No

### Changes from 2005

	2009	2005	Change from 2005	Comparable to 2005
Grade 4	229	225	4.1*	No
Grade 8	273	266	7.4*	No

Indiana made substantive changes to its mathematics assessments between 2007 and 2009; the NAEP scale equivalent of its grade 4 standards did not change but the NAEP scale equivalent of its grade 8 standards increased.

Indiana made substantive changes to its mathematics assessments between 2005 and 2009, and the NAEP scale equivalent of its standards at both grades increased.

\* Statistically different from zero ( $p < .05$ ).

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2005, 2007, and 2009 Mathematics Assessments. U.S. Department of Education, Office of Planning, Evaluation and Policy Development, EDFacts SY 2008-09, Washington, DC, 2010. U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2007 and 2009 Surveys of State Assessment Program Characteristics. The National Longitudinal School-Level State Assessment Score Database (NLSLSASD) 2010.

## Mathematics

Do NAEP and the Indiana mathematics assessments show the same changes in the proportion of students meeting the state proficiency standards from 2007 to 2009?

Because Indiana made substantive changes to its mathematics assessments between 2007 and 2009, meaningful comparisons between measures of change in achievement cannot be made.

### Changes to Indiana's mathematics assessments between 2007 and 2009

	No significant changes	Changed cut scores	Changed the period of administration	Changed assessment items	Used entirely different assessment	Realigned to new content standards	Changed proficiency standards	Changed accommodation policy	Changed re-test policy	Changed test contractors	Other changes
Grade 4		Yes	Yes	Yes							Yes
Grade 8		Yes	Yes	Yes							Yes

### Composition of Indiana's main mathematics test in 2008-09

	Multiple choice		Short constructed response		Extended constructed response		Performance tasks		Other	
	Number of items	Proportion of score	Number of items	Proportion of score	Number of items	Proportion of score	Number of items	Proportion of score	Number of items	Proportion of score
Grade 4	43	80%	3	13%	1	7%	0	0%	0	0%
Grade 8	46	80%	3	13%	1	7%	0	0%	0	0%

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2005, 2007, and 2009 Mathematics Assessments. U.S. Department of Education, Office of Planning, Evaluation and Policy Development, EDFacts SY 2008-09, Washington, DC, 2010. U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2007 and 2009 Surveys of State Assessment Program Characteristics. The National Longitudinal School-Level State Assessment Score Database (NLSLSASD) 2010.

For additional information, refer to the report and documentation at <http://nces.ed.gov/nationsreportcard/studies/statemapping>.