

TRENDS IN INTERNATIONAL MATHEMATICS AND SCIENCE STUDY

TIMSS



TIMSS 2007 User Guide for the International Database

Released Items

Mathematics – Fourth Grade



TIMSS & PIRLS
International Study Center
Lynch School of Education, Boston College

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TIMSS 2007 User Guide for the International Database

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Item ID	Subject	Grade	Block	Block Seq	Content Domain	Cognitive Domain	Maximum Points	Key
M031286	M	4	M01	01	Number	Knowing	1	See scoring guide
M031106	M	4	M01	02	Number	Reasoning	1	See scoring guide
M031282	M	4	M01	03	Number	Reasoning	2	See scoring guide
M031227	M	4	M01	04	Number	Reasoning	1	See scoring guide
M031335	M	4	M01	05	Number	Reasoning	1	C
M031068	M	4	M01	06	Number	Reasoning	1	See scoring guide
M031299	M	4	M01	07	Number	Applying	1	See scoring guide
M031301	M	4	M01	08	Number	Applying	1	See scoring guide
M031271	M	4	M01	09	Geometric Shapes and Measures	Knowing	1	See scoring guide
M031134	M	4	M01	10	Data Display	Applying	1	See scoring guide
M031045	M	4	M01	11	Data Display	Reasoning	1	A
M041014	M	4	M02	01	Number	Knowing	1	D
M041039	M	4	M02	02	Number	Applying	1	B
M041278	M	4	M02	03	Number	Knowing	1	See scoring guide
M041006	M	4	M02	04	Number	Knowing	1	B
M041250	M	4	M02	05	Number	Knowing	1	See scoring guide
M041094	M	4	M02	06	Number	Applying	1	A
M041330	M	4	M02	07	Geometric Shapes and Measures	Applying	1	C
M041300A	M	4	M02	08	Geometric Shapes and Measures	Applying	1	See scoring guide
M041300B	M	4	M02	08	Geometric Shapes and Measures	Applying	1	See scoring guide
M041300C	M	4	M02	08	Geometric Shapes and Measures	Reasoning	1	See scoring guide
M041300D	M	4	M02	08	Geometric Shapes and Measures	Reasoning	1	See scoring guide
M041173	M	4	M02	09	Geometric Shapes and Measures	Knowing	1	C
M041274	M	4	M02	10	Data Display	Applying	1	See scoring guide
M041203	M	4	M02	11	Data Display	Reasoning	1	See scoring guide
M031235	M	4	M03	01	Number	Reasoning	1	See scoring guide
M031285	M	4	M03	02	Number	Reasoning	1	See scoring guide
M031050	M	4	M03	03	Number	Applying	1	A
M031258	M	4	M03	04	Number	Reasoning	1	See scoring guide
M031334	M	4	M03	05	Number	Applying	1	C
M031255	M	4	M03	06	Number	Applying	1	B
M031041	M	4	M03	07	Geometric Shapes and Measures	Applying	1	See scoring guide
MP31350	M	4	M03	08				
M031350A	M	4	M03	08	Geometric Shapes and Measures	Applying	1	See scoring guide
M031350B	M	4	M03	08	Geometric Shapes and Measures	Reasoning	1	See scoring guide
M031350C	M	4	M03	08	Geometric Shapes and Measures	Applying	1	See scoring guide
M031274	M	4	M03	09	Geometric Shapes and Measures	Applying	1	See scoring guide
M031240	M	4	M03	10	Data Display	Applying	1	See scoring guide
M041052	M	4	M04	01	Number	Knowing	1	B
M041056	M	4	M04	02	Number	Knowing	1	See scoring guide
M041069	M	4	M04	03	Number	Knowing	1	C
M041076	M	4	M04	04	Number	Knowing	1	See scoring guide
M041281	M	4	M04	05	Number	Applying	1	D

Item ID	Subject	Grade	Block	Block Seq	Content Domain	Cognitive Domain	Maximum Points	Key
M041164	M	4	M04	06	Geometric Shapes and Measures	Knowing	1	A
M041146	M	4	M04	07	Geometric Shapes and Measures	Applying	1	See scoring guide
M041152	M	4	M04	08	Geometric Shapes and Measures	Applying	1	C
M041258A	M	4	M04	09	Geometric Shapes and Measures	Reasoning	1	See scoring guide
M041258B	M	4	M04	09	Geometric Shapes and Measures	Reasoning	1	See scoring guide
M041131	M	4	M04	10	Geometric Shapes and Measures	Knowing	1	C
M041275	M	4	M04	11	Data Display	Applying	2	See scoring guide
M041186	M	4	M04	12	Data Display	Knowing	1	D
M041336	M	4	M04	13	Data Display	Reasoning	1	A
M031303	M	4	M05	01	Number	Applying	1	C
M031309	M	4	M05	02	Number	Applying	1	See scoring guide
M031245	M	4	M05	03	Number	Applying	1	D
M031242A	M	4	M05	04	Number	Applying	1	See scoring guide
M031242B	M	4	M05	04	Data Display	Knowing	1	See scoring guide
M031242C	M	4	M05	04	Data Display	Reasoning	1	B
M031247	M	4	M05	05	Number	Reasoning	2	See scoring guide
M031219	M	4	M05	06	Geometric Shapes and Measures	Knowing	1	B
M031173	M	4	M05	07	Number	Applying	1	D
M031085	M	4	M05	08	Geometric Shapes and Measures	Knowing	1	A
M031172	M	4	M05	09	Data Display	Applying	1	A
M031029	M	4	M07	01	Number	Knowing	1	A
M031030	M	4	M07	02	Number	Knowing	1	See scoring guide
M031332	M	4	M07	03	Number	Knowing	1	B
M031098	M	4	M07	04	Number	Applying	1	C
M031254	M	4	M07	05	Number	Applying	1	B
M031038	M	4	M07	06	Geometric Shapes and Measures	Knowing	1	D
M031276	M	4	M07	07	Number	Knowing	1	D
M031064	M	4	M07	08	Number	Reasoning	1	A
M031006	M	4	M07	09	Geometric Shapes and Measures	Knowing	1	B
M031330	M	4	M07	10	Geometric Shapes and Measures	Knowing	1	See scoring guide
M031351	M	4	M07	11	Geometric Shapes and Measures	Applying	1	D
M031135	M	4	M07	12	Data Display	Reasoning	1	B

In a car park, 762 cars were parked in 6 equal rows. How many cars were in each row?

Answer: _____

M031286

TIMSS2007

Mathematics

Fourth Grade

Content Domain

Number

Cognitive Domain

Knowing

Maximum Points

1

Key

See scoring guide

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Item ID

M031286

Subject

M

Grade

4

Block

M01

Block Seq

01

Code	Response	Item: M031286
	Correct Response	
10	127	
	Incorrect Response	
70	4572	
79	Other incorrect (including crossed out/erased, stray marks, illegible, or off task)	
	Nonresponse	
99	Blank	

$$\begin{array}{r} 942 \\ -5\blacksquare7 \\ \hline 415 \end{array}$$

Mano did the subtraction problem above for homework but spilled some of his drink on it. One digit could not be read. His answer of 415 was correct. What is the missing digit?

Answer: _____

M031106

TIMSS2007**Mathematics
Fourth Grade****Content Domain**

Number

Cognitive Domain

Reasoning

Maximum Points

1

Key

See scoring guide

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Item ID **M031106**Subject **M****M**Grade **4****4**Block **M01****M01**Block Seq **02****02**

Code	Response	Item: M031106
	Correct Response	
10	2	
11	527	
	Incorrect Response	
70	3 OR 537	
79	Other incorrect (including crossed out/erased, stray marks, illegible, or off task)	
	Nonresponse	
99	Blank	

Last year there were 92 boys and 83 girls in Fairmont School. This year there are 210 students, and 97 are boys. How many more girls are there this year than last year? Show your work.

Answer: _____

M031282

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TIMSS2007**Mathematics****Fourth Grade****Content Domain**

Number

Cognitive Domain

Reasoning

Maximum Points

2

Key

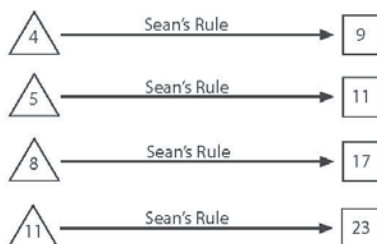
See scoring guide



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Code	Response	Item: M031282
	Correct Response	
20	30 with work shown	
	Partial Response	
10	30 with no work shown	
11	Correct method with computational error	
	Incorrect Response	
70	113	
79	Other incorrect (including crossed out/erased, stray marks, illegible or off task)	
	Nonresponse	
99	Blank	

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Mathematics
Fourth Grade

Sean used the same rule to get the number in the from the number in the \triangle .
What was the rule?

Answer: _____

M031227

Content Domain

Number

Cognitive Domain

Reasoning

Maximum Points

1

Key

See scoring guide

Code	Response	Item: M031227
	Correct Response	
10	Double the number in the triangle and add 1 (e.g., double and add 1; multiply by 2 and add 1)	
19	Other correct, including adding the next highest number to the given number in the triangle (e.g., $4 + 5 = 9$)	
	Incorrect Response	
79	Incorrect (including crossed out/erased, stray marks, illegible, or off task)	
	Nonresponse	
99	Blank	

The temperature at 7 a.m. one morning was 12°C . It increased by 2°C every hour until it reached 20°C at 11 a.m. What was the temperature at 9 a.m.?

- (A) 14°C
- (B) 15°C
- (C) 16°C
- (D) 17°C

M031335

TIMSS2007**Mathematics****Fourth Grade****Content Domain**

Number

Cognitive Domain

Reasoning

Maximum Points

1

Key

C

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Don, Rob, and Lynn walk home from school together. It takes them 25 minutes to walk to Lynn's house. Then it takes Don and Rob 10 minutes to get to Rob's house. From there it takes Don 5 minutes to walk home.

At what time must they leave school so that Don arrives home at 3:50 p.m.?

Answer: _____ p.m.

M031068

TIMSS2007**Mathematics****Fourth Grade****Content Domain**

Number

Cognitive Domain

Reasoning

Maximum Points

1

Key

See scoring guide

Code	Response	Item: M031068
	Correct Response	
10	3:10	
	Incorrect Response	
70	3:00	
79	Other incorrect (including crossed out/erased, stray marks, illegible, or off task)	
	Nonresponse	
99	Blank	

A bottle contains 1 liter of water. Tony pours 250 milliliters into a glass. How much water is left in the bottle?

Answer: _____ milliliters

M031299

TIMSS2007**Mathematics****Fourth Grade****Content Domain**

Number

Cognitive Domain

Applying

Maximum Points

1

Key

See scoring guide



Code	Response	Item: M031299
	Correct Response	
10	750	
	Incorrect Response	
79	Incorrect (including crossed out/erased, stray marks, illegible, or off task)	
	Nonresponse	
99	Blank	

Al wanted to find how much his cat weighed. He weighed himself and noted that the scale read 57 kg. He then stepped on the scale holding his cat and found that it read 62 kg.

What was the weight of the cat in kilograms?

Answer: _____ kilograms

M031301

TIMSS2007**Mathematics****Fourth Grade****Content Domain**

Number

Cognitive Domain

Applying

Maximum Points

1

Key

See scoring guide

Item ID

M031301

Subject

M

Grade

4

Block

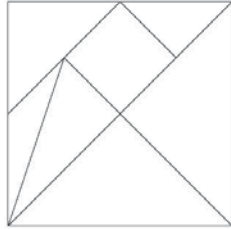
M01

Block Seq

08

Code	Response	Item: M031301
	Correct Response	
10	5	
	Incorrect Response	
70	15	
79	Other incorrect (including crossed out/erased, stray marks, illegible, or off task)	
	Nonresponse	
99	Blank	

The square is cut into 7 pieces. Put an X on each of the 2 triangles that are the same size and shape.



M031271

TIMSS2007**Mathematics****Fourth Grade****Content Domain**Geometric Shapes
and Measures**Cognitive Domain**

Knowing

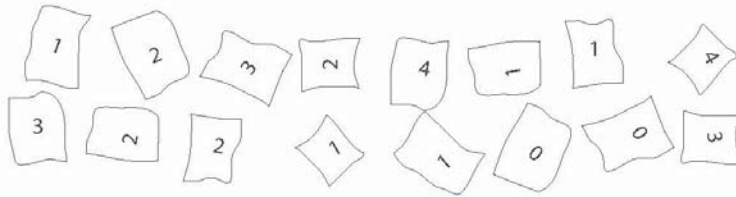
Maximum Points

1

Key

See scoring guide

Code	Response	Item: M031271
	Correct Response	
10	The two congruent triangles below the diagonal marked	
	Incorrect Response	
79	Incorrect (including crossed out/erased, stray marks, illegible, or off task)	
	Nonresponse	
99	Blank	



Jasmin asked her classmates to write down how many brothers and sisters they had. She collected their answers and started to make a tally chart. She put in the two marks for the zeroes.

Complete Jasmin's tally chart.

Number of brothers and sisters	Tally
0	//
1	
2	
3	
4	

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Mathematics

Fourth Grade

Content Domain

Data Display

Cognitive Domain

Applying

Maximum Points

1

Key

See scoring guide

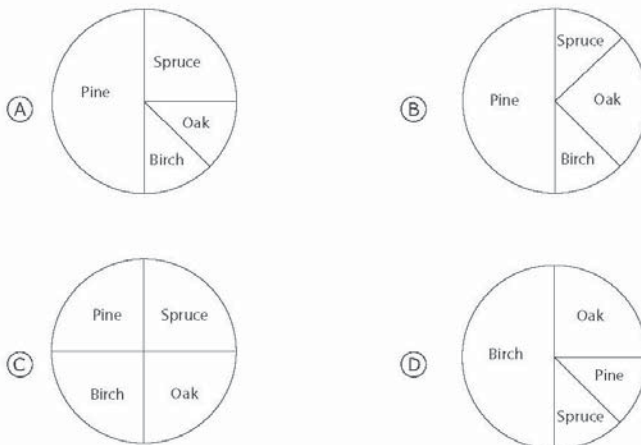
Code	Response	Item: M031134
	Correct Response	
10	Number of tally marks in table as listed below.	
	Number	Number of Tally Marks
	1	5 tally marks
	2	4 tally marks
	3	3 tally marks
	4	2 tally marks
	Incorrect Response	
70	One tally incorrect	
71	Two or more tallies incorrect	
79	Other incorrect (including crossed out/erased, stray marks, illegible, or off task)	
	Nonresponse	
99	Blank	

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Mathematics
Fourth Grade

Type of Tree	Number of Trees
Pine	200
Spruce	100
Oak	50
Birch	50

The table above shows the numbers of four types of trees growing in a park. Which of the following pie charts correctly displays the information shown in the table?



Content Domain
Data Display

Cognitive Domain
Reasoning

Maximum Points

1

Key

A

TIMSS2007

Mathematics Fourth Grade

In which of the following are the numbers arranged from LARGEST to SMALLEST?

- (A) 36, 43, 66, 87
- (B) 66, 43, 36, 87
- (C) 87, 66, 36, 43
- (D) 87, 66, 43, 36

M041014

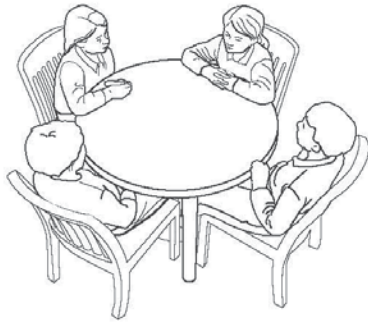
Content Domain
Number

Cognitive Domain
Knowing

Maximum Points
1

Key
D

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One table can seat 4 people.

How would you find out how many tables are needed to seat 28 people?

- (A) Multiply 28 by 4.
- (B) Divide 28 by 4.
- (C) Subtract 4 from 28.
- (D) Add 4 to 28.

M041039

TIMSS2007**Mathematics****Fourth Grade****Content Domain**

Number

Cognitive Domain

Applying

Maximum Points

1

Key

B

M041278

Multiply:

53×26

Answer: _____

TIMSS2007**Mathematics****Fourth Grade****Content Domain**

Number

Cognitive Domain

Knowing

Maximum Points

1

Key

See scoring guide

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Item ID M041278**Subject** M

M

Grade 4

4

Block M02

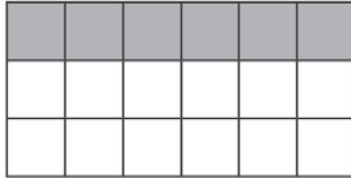
M02

Block Seq 03

03

Code	Response	Item: M041278
	Correct Response	
10	1378	
	Incorrect Response	
70	118	
79	Other incorrect (including crossed out, erased, stray marks, illegible, or off task)	
	Nonresponse	
99	Blank	

What fraction of this rectangle is shaded?



- (A) $\frac{1}{4}$
- (B) $\frac{1}{3}$
- (C) $\frac{6}{12}$
- (D) $\frac{2}{3}$

M041006

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TIMSS2007**Mathematics****Fourth Grade****Content Domain**

Number

Cognitive Domain

Knowing

Maximum Points

1

Key

B



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Subtract:

$$5.3 - 3.8$$

Answer: _____

M041250

TIMSS2007**Mathematics****Fourth Grade****Content Domain**

Number

Cognitive Domain

Knowing

Maximum Points

1

Key

See scoring guide



Code	Response	Item: M041250
	Correct Response	
10	1.5	
	Incorrect Response	
70	2.5	
71	15	
79	Other incorrect (including crossed out, erased, stray marks, illegible, or off task)	
	Nonresponse	
99	Blank	

Bob has 10 zeds. For lunch, he buys a bottle of fruit juice for 2.50 zeds and a sandwich for 3.85 zeds. How much money does Bob have left after he has paid for his lunch?

- (A) 3.65 zeds
- (B) 4.75 zeds
- (C) 6.35 zeds
- (D) 16.35 zeds

M041094

TIMSS2007**Mathematics****Fourth Grade****Content Domain**

Number

Cognitive Domain

Applying

Maximum Points

1

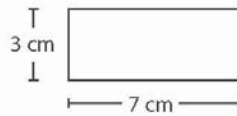
Key

A

TIMSS2007

Mathematics

Fourth Grade



What is the perimeter of this rectangle?

- (A) 7 cm
- (B) 10 cm
- (C) 20 cm
- (D) 21 cm

M041330

Content Domain

Geometric Shapes
and Measures

Cognitive Domain

Applying

Maximum Points

1

Key

C

Geometry Tiles

Instruction:

For this item, you have been given a piece of cardboard with 6 tiles like the ones shown below. Take the piece of cardboard, and punch out the 6 tiles.

If you do not have the piece of cardboard, raise your hand.

4 Triangle Tiles



2 Trapezoid Tiles

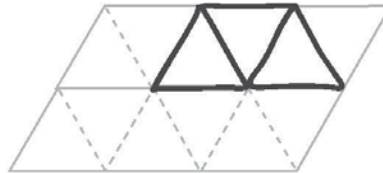


These tiles can be used to make new figures. One problem has been done for you

USE: 3 Triangle Tiles

MAKE: A trapezoid

SHOW: Draw it on the grid.



Now try these problems.

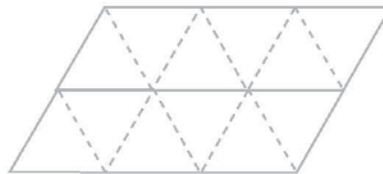
A.

USE: 1 Triangle Tile and

1 Trapezoid Tile

MAKE: A 4-sided figure

SHOW: Draw it on the grid.

**Content Domain**Geometric Shapes
and Measures**Cognitive Domain**


Applying

Maximum Points

1

Key

See scoring guide

Code	Response	Item: M041300A
	Correct Response	
10	Correct 4-sided figure turned in any position	
		
	Incorrect Response	
70	Makes a larger triangle	
71	Makes a 4-sided figure, but not using the specified tiles, e.g., a larger parallelogram.	
79	Other incorrect (including crossed out, erased, stray marks, illegible, or off task)	
	Nonresponse	
99	Blank	

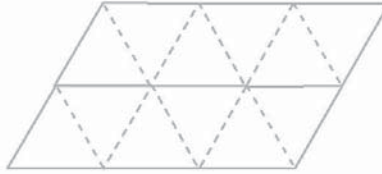
TIMSS2007

Mathematics

Fourth Grade

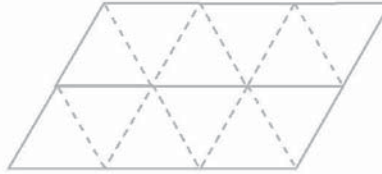
B.

USE: 2 Trapezoid Tiles
 MAKE: A 6-sided figure
 SHOW: Draw it on the grid.



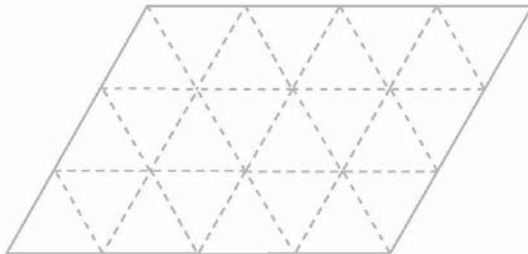
C.

USE: 2 Trapezoid Tiles
 MAKE: A 6-sided figure that is not the same shape as the one you made in Part B
 SHOW: Draw it on the grid.



D.

USE: 2 Triangle Tiles and 1 Trapezoid Tile
 MAKE: A 7-sided figure
 SHOW: Draw it on the grid.



Content Domain

Geometric Shapes
 and Measures

Cognitive Domain

Applying

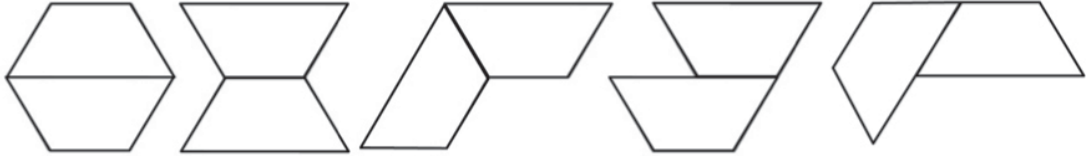
Maximum Points

1

Key

See scoring guide

M041300_2

Code	Response	Item: M041300B
	Correct Response	
10	Makes a correct 6-sided figure, e.g., one of those shown below (in any orientation).	
		
	Incorrect Response	
79	Incorrect (including crossed out, erased, stray marks, illegible, or off task)	
	Nonresponse	
99	Blank	

B.

USE: 2 Trapezoid Tiles
 MAKE: A 6-sided figure
 SHOW: Draw it on the grid.



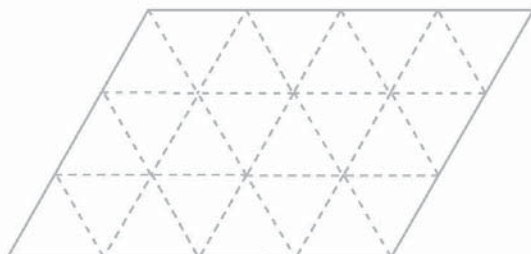
C.

USE: 2 Trapezoid Tiles
 MAKE: A 6-sided figure that is not the same shape as the one you made in Part B
 SHOW: Draw it on the grid.



D.

USE: 2 Triangle Tiles and 1 Trapezoid Tile
 MAKE: A 7-sided figure
 SHOW: Draw it on the grid.



TIMSS2007

Mathematics

Fourth Grade

Content Domain

Geometric Shapes and Measures

Cognitive Domain

Reasoning

Maximum Points

1

Key

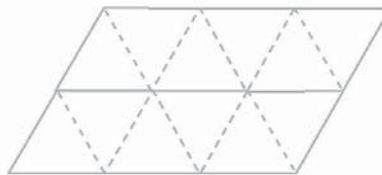
See scoring guide

M041300_2

Code	Response	Item: M041300C
	Correct Response	
10	Any of four figures (6-sided) that was not used in part B.	
	Incorrect Response	
70	Repeats a correct figure already given in part B	
79	Other incorrect (including crossed out, erased, stray marks, illegible, or off task)	
	Nonresponse	
99	Blank	

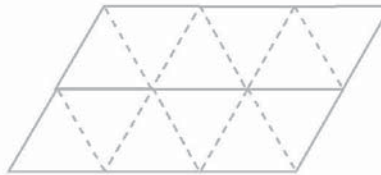
B.

USE: 2 Trapezoid Tiles
 MAKE: A 6-sided figure
 SHOW: Draw it on the grid.



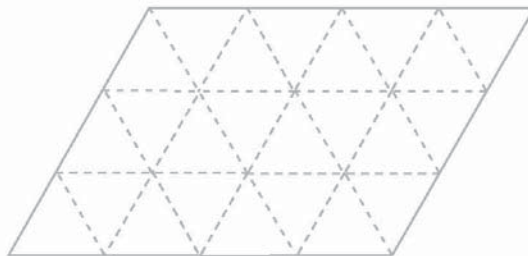
C.

USE: 2 Trapezoid Tiles
 MAKE: A 6-sided figure that is not the same shape as the one you made in Part B
 SHOW: Draw it on the grid.



D.

USE: 2 Triangle Tiles and 1 Trapezoid Tile
 MAKE: A 7-sided figure
 SHOW: Draw it on the grid.



TIMSS2007

Mathematics

Fourth Grade

Content Domain

Geometric Shapes and Measures

Cognitive Domain

Reasoning

Maximum Points

1

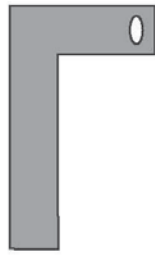
Key

See scoring guide

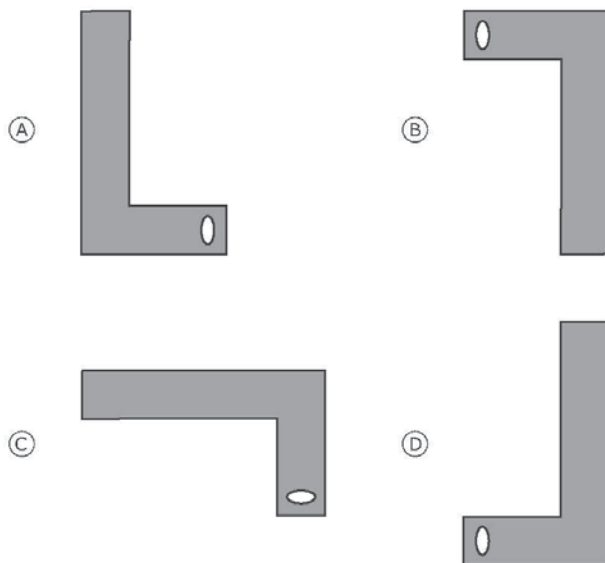
M041300_2

Code	Response	Item: M041300D
	Correct Response	
10	Makes a correct 7-sided figure, e.g., one of those shown below (in any orientation).	
	Incorrect Response	
79	Incorrect (including crossed out, erased, stray marks, illegible, or off task)	
	Nonresponse	
99	Blank	

TIMSS2007

Mathematics
Fourth Grade

The shape above is rotated by 90° clockwise. Which shape is the result?

**Content Domain**Geometric Shapes
and Measures**Cognitive Domain**

Knowing

Maximum Points

1

Key

C

M041173

A spinner can land on 3 different colors. Here are the results after 100 spins.

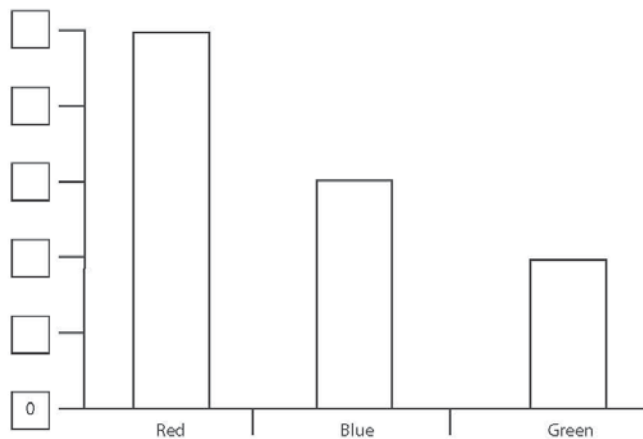


Spinner Results

Red	50
Blue	30
Green	20

Jenny starts to draw this graph to show the result. Help Jenny by writing the correct numbers in the boxes to complete the scale.

Bar graph



M041274

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TIMSS2007

Mathematics
Fourth Grade

Content Domain

Data Display

Cognitive Domain

Applying

Maximum Points

1

Key

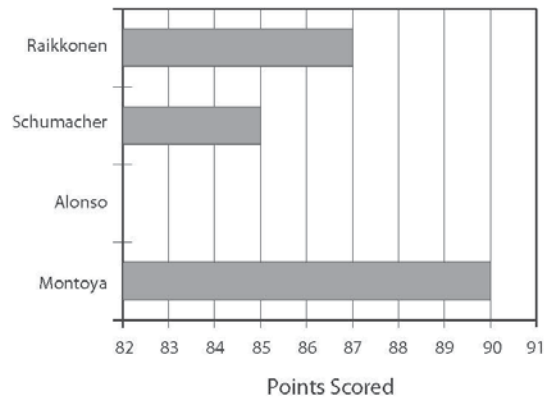
See scoring guide



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Code	Response	Item: M041274
	Correct Response	
10	All correct numbers shown: 50 40 30 20 10	
	Incorrect Response	
70	Only 20, 30, 50 correctly entered on the scale.	
79	Incorrect (including crossed out, erased, stray marks, illegible, or off task)	
	Nonresponse	
99	Blank	

This graph shows the points obtained by 4 drivers in the car racing championship. Montoya is in first place. Alonso is in third place. Draw a bar which shows how many points Alonso has scored.



M041203

TIMSS 2007

Mathematics

Fourth Grade

Content Domain

Data Display

Cognitive Domain

Reasoning

Maximum Points

1

Key

See scoring guide

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Item ID

M041203

Subject

M

Grade

4

Block

M02

Block Seq

11

Code	Response	Item: M041203
	Correct Response	
10	Bar at 86	
	Incorrect Response	
70	Bar between 85-87 exclusive but not at 86	
79	Other Incorrect (including crossed out, erased, stray marks, illegible, or off task)	
	Nonresponse	
99	Blank	

A group of 8 children have 74 sweets altogether. How many more sweets are needed for the children to be able to share them equally?

Answer: _____

M031235

TIMSS2007

Mathematics

Fourth Grade

Content Domain

Number

Cognitive Domain

Reasoning

Maximum Points

1

Key

See scoring guide

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Code	Response	Item: M031235
	Correct Response	
10	6 or any number other than 6 that added to 74 gives a multiple of 8 (e.g., 14, 22)	
	Incorrect Response	
70	9.25, $9\frac{1}{4}$, or 9 with 2 remainder	
71	2 (remainder) or 9	
79	Other incorrect (including crossed out/erased, stray marks, illegible, or off task)	
	Nonresponse	
99	Blank	

Two boys went running. For every 2 km that Fred ran, Alan ran 3 km. Fred ran 6 km. How far did Alan run?

Answer: _____ km

M031285

TIMSS2007**Mathematics****Fourth Grade****Content Domain**

Number

Cognitive Domain

Reasoning

Maximum Points

1

Key

See scoring guide

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Code	Response	Item: M031285
	Correct Response	
10	9	
	Incorrect Response	
70	7	
79	Other incorrect (including crossed out/erased, stray marks, illegible, or off task)	
	Nonresponse	
99	Blank	

Ken measured the length of a blackboard using a 30 cm ruler. The blackboard was 6 cm less than 9 times the length of the ruler. What is the length of the blackboard?

- (A) 264 cm
- (B) 270 cm
- (C) 276 cm
- (D) 279 cm

M031050

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TIMSS2007**Mathematics****Fourth Grade****Content Domain**

Number

Cognitive Domain

Applying

Maximum Points

1

Key

A



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TIMSS 2007

Mathematics
Fourth Grade

Ann uses a rule to get her number from Mary's number, as shown in the table.

Mary's Number	Ann's Number
1	→ 3
2	→ 6
4	→ 12
6	→ 18

What is the rule Ann uses to get her number?

M031258

Content Domain
Number

Cognitive Domain
Reasoning

Maximum Points
1

Key
See scoring guide

Code	Response	Item: M031258
	Correct Response	
10	"Multiply by 3" or other fully correct	
	Incorrect Response	
70	Multiply without specifying by what	
79	Other incorrect (including crossed out/erased, stray marks, illegible, or off task)	
	Nonresponse	
99	Blank	

2, 5, 11, 23, ...

Starting the pattern at 2, which of these rules would give each of the terms in the number pattern above?

- (A) Add 1 to the previous term and then multiply by 2.
- (B) Multiply the previous term by 3 and then subtract 1.
- (C) Multiply the previous term by 2 and then add 1.
- (D) Subtract 1 from the previous term and then multiply by 3.

M031334

TIMSS2007**Mathematics****Fourth Grade****Content Domain**

Number

Cognitive Domain

Applying

Maximum Points

1

Key

C

$$64 \div \blacksquare = \blacksquare$$

In this number sentence, \blacksquare stands for the same number. What number does \blacksquare stand for?

- (A) 4
- (B) 8
- (C) 16
- (D) 32

M031255

TIMSS2007**Mathematics****Fourth Grade****Content Domain**

Number

Cognitive Domain

Applying

Maximum Points

1

Key

B

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TIMSS2007**Mathematics****Fourth Grade**

How many triangular tiles like this are needed to cover the figure below?



Answer: _____

M031041

Content DomainGeometric Shapes
and Measures**Cognitive Domain**

Applying

Maximum Points

1

Key

See scoring guide

Code	Response	Item: M031041
	Correct Response	
10	5	
	Incorrect Response	
70	6	
79	Other incorrect (including crossed out/erased, stray marks, illegible, or off task)	
	Nonresponse	
99	Blank	

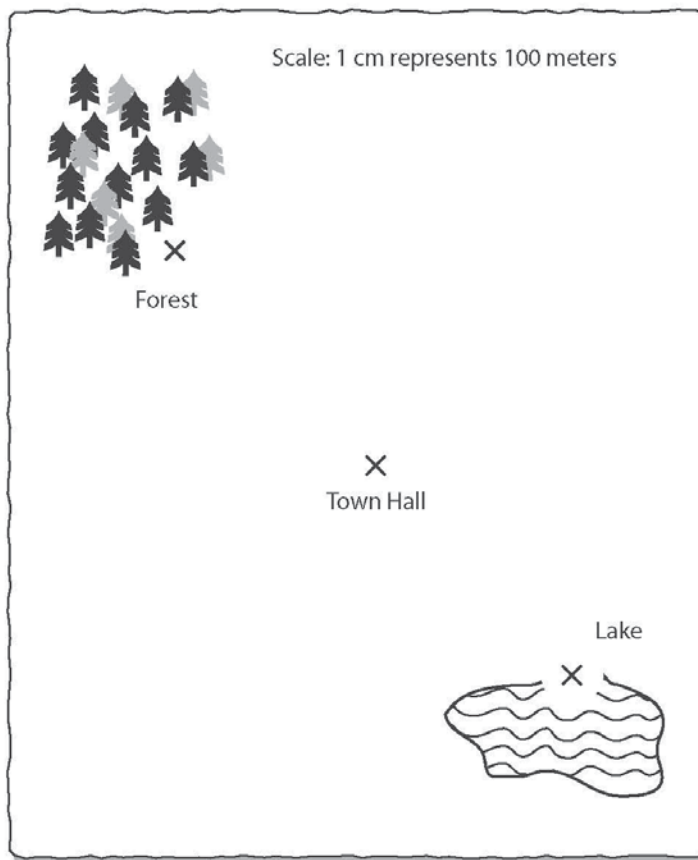
TIMSS2007

Mathematics
Fourth Grade

For this item, you have been given a cardboard ruler. If you do not have the cardboard ruler raise your hand. Use the map below and your ruler to answer this set of questions.

Marytown is a new town. The people of Marytown are planning their new town. They decided to put the town hall halfway between the lake and the forest, as shown on the map below. They made their measurements from the X's.

Marytown



This Marytown question continues on the next page. ➔

Content Domain

Cognitive Domain

Maximum Points

Key

MP31350

Add a park, a library, and a school to the map of Marytown using the following information.

- A. The **park** should be 200 meters from the lake so people can go fishing and swimming. On the map, mark with an X where you would put the **park** and write **park** below the X.
- B. The **library** should be at least 300 meters but no more than 400 meters from the town hall. On the map, mark with an X where you would put the **library** and write **library** below the X.
- C. The **school** should be halfway between the park and the library. On the map, mark with an X where you would put the **school** and write **school** below the X.

End of Marytown section. ●

M031350

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TIMSS2007

Mathematics

Fourth Grade

Content Domain

Geometric Shapes and Measures

Cognitive Domain

Applying

Maximum Points

1

Key

See scoring guide



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Code	Response	Item: M031350A
	Correct Response	
10	Park 2.0 cm from lake, measured from X to X (+/- 2 mm)	
	Incorrect Response	
79	Incorrect (including crossed out/erased, stray marks, illegible, or off task)	
	Nonresponse	
99	Blank	

Add a park, a library, and a school to the map of Marytown using the following information.

- A. The **park** should be 200 meters from the lake so people can go fishing and swimming. On the map, mark with an X where you would put the **park** and write **park** below the X.
- B. The **library** should be at least 300 meters but no more than 400 meters from the town hall. On the map, mark with an X where you would put the **library** and write **library** below the X.
- C. The **school** should be halfway between the park and the library. On the map, mark with an X where you would put the **school** and write **school** below the X.

End of Marytown section. ●

M031350

TIMSS2007

Mathematics

Fourth Grade

Content Domain

Geometric Shapes and Measures

Cognitive Domain

Reasoning

Maximum Points

1

Key

See scoring guide

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Note: Park and library need not to be in a straight line.

Code	Response	Item: M031350B
	Correct Response	
10	Library between 2.8 cm and 4.2 cm from town hall, measured from X to X	
	Incorrect Response	
70	Library less than 2.8 cm from town hall, measured from X to X	
71	Library more than 4.2 cm from town hall, measured from X to X	
79	Other incorrect (including crossed out/erased, stray marks, illegible, or off task)	
	Nonresponse	
99	Blank	

Add a park, a library, and a school to the map of Marytown using the following information.

- A. The **park** should be 200 meters from the lake so people can go fishing and swimming. On the map, mark with an X where you would put the **park** and write **park** below the X.
- B. The **library** should be at least 300 meters but no more than 400 meters from the town hall. On the map, mark with an X where you would put the **library** and write **library** below the X.
- C. The **school** should be halfway between the park and the library. On the map, mark with an X where you would put the **school** and write **school** below the X.

End of Marytown section. ●

M031350

TIMSS 2007

Mathematics

Fourth Grade

Content Domain

Geometric Shapes and Measures

Cognitive Domain

Applying

Maximum Points

1

Key

See scoring guide

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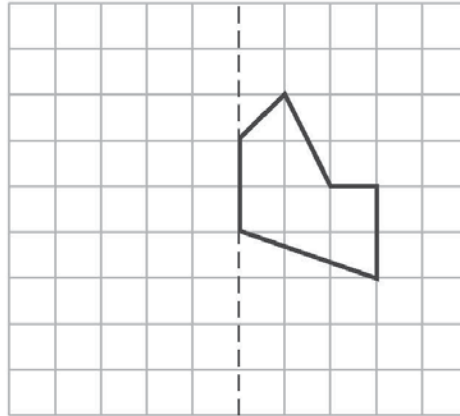


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Note: Park, library, and school need not to be in a straight line.

Code	Response	Item: M031350C
	Correct Response	
10	School equidistant from park and library, X to X, measures to differ no more than 4mm	
	Incorrect Response	
70	School is not equidistant (+/- 2 mm) from park and library	
79	Other incorrect (including crossed out/erased, stray marks, illegible, or off task)	
	Nonresponse	
99	Blank	

On the grid below, draw the reflection of the shape in the dotted line of symmetry.



M031274

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TIMSS2007**Mathematics****Fourth Grade****Content Domain**Geometric Shapes
and Measures**Cognitive Domain**

Applying

Maximum Points

1

Key

See scoring guide

**TIMSS & PIRLS**
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Code	Response	Item: M031274
	Correct Response	
10	Image correctly drawn	
	Incorrect Response	
70	One or more of image lines drawn correctly, but image not completely correct	
71	Attempt to sketch an image under a transformation other than reflection (e.g., translation of image)	
79	Other incorrect (including crossed out/erased, stray marks, illegible, or off task)	
	Nonresponse	
99	Blank	

TIMSS2007**Mathematics****Fourth Grade**

There were 5 children at the park. Some were wearing hats and some were not.

Girls	Boys
Maria was wearing a hat	Peter was wearing a hat
Megan was not wearing a hat	Chan was not wearing a hat
Mandy was not wearing a hat	

Complete the table to show the number of boys and girls that were wearing hats and were not wearing hats.

	Hat	No hat
Boys		
Girls		

M031240

Content Domain

Data Display

Cognitive Domain

Applying

Maximum Points

1

Key

See scoring guide

Code	Response	Item: M031240
	Correct Response	
10	Boys: 1 hat, 1 no hat } or equivalent tallies Girls: 1 hat, 2 no hat }	
	Incorrect Response	
70	Names of boys and girls correctly placed in table	
79	Other Incorrect (including crossed out/erased, stray marks, illegible, or off task)	
	Nonresponse	
99	Blank	

Which number equals 3 ones + 2 tens + 4 hundreds?

- (A) 432
- (B) 423
- (C) 324
- (D) 234

M041052

TIMSS2007**Mathematics****Fourth Grade****Content Domain**

Number

Cognitive Domain

Knowing

Maximum Points

1

Key

B

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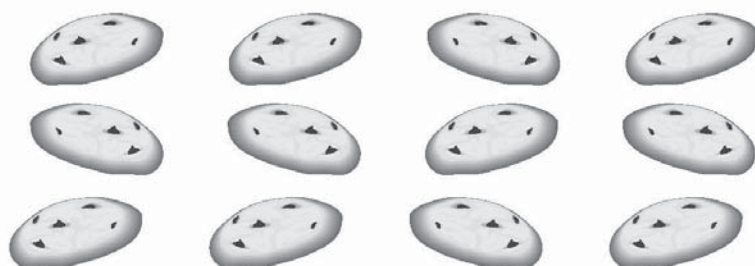


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TIMSS 2007

Mathematics

Fourth Grade



There are 12 cookies. Draw a circle around $\frac{1}{3}$ of the cookies.

M041056

Content Domain

Number

Cognitive Domain

Knowing

Maximum Points

1

Key

See scoring guide

Code	Response	Item: M041056
	Correct Response	
10	Draws a circle around any 4 cookies or draws separate circles around 4 cookies or draws 3 circles, each circle enclosing 4 cookies	
	Incorrect Response	
70	Draws a circle around 3 cookies	
79	Other incorrect (including crossed out, erased, stray marks, illegible, or off task)	
	Nonresponse	
99	Blank	

TIMSS2007

Mathematics

Fourth Grade

Which fraction is equal to $\frac{2}{3}$?

- (A) $\frac{3}{4}$
- (B) $\frac{4}{9}$
- (C) $\frac{4}{6}$
- (D) $\frac{3}{2}$

M041069

Content Domain

Number

Cognitive Domain

Knowing

Maximum Points

1

Key

C

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Joe spent $\frac{3}{10}$ of his money on a pen and $\frac{5}{10}$ of it on a book.

What fraction of his money did he spend?

Answer: _____

M041076

TIMSS2007**Mathematics****Fourth Grade****Content Domain**

Number

Cognitive Domain

Knowing

Maximum Points

1

Key

See scoring guide

Code	Response	Item: M041076
	Correct Response	
10	$\frac{8}{10}$ or equivalent	
	Incorrect Response	
70	$\frac{8}{20}$	
79	Other incorrect (including crossed out, erased, stray marks, illegible, or off task)	
	Nonresponse	
99	Blank	

Layne had 32 pencils and 4 boxes for the pencils.
He put the same number of pencils into each box.
Which number sentence describes how many pencils he put into each box?

- (A) $32 + 4 = \square$
(B) $32 - 4 = \square$
(C) $32 \times 4 = \square$
(D) $32 \div 4 = \square$

M041281

TIMSS2007**Mathematics****Fourth Grade****Content Domain**

Number

Cognitive Domain

Applying

Maximum Points

1

Key

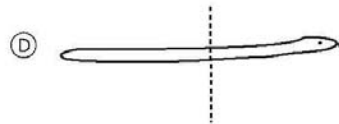
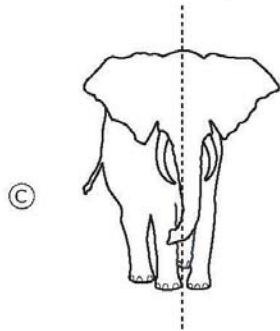
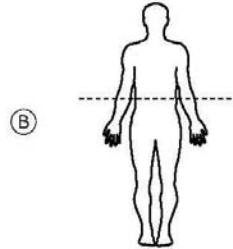
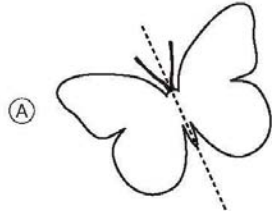
D

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In which of these drawings is the dotted line a line of symmetry?



M041164

TIMSS2007

Mathematics

Fourth Grade

Content Domain

Geometric Shapes
and Measures

Cognitive Domain

Knowing

Maximum Points

1

Key

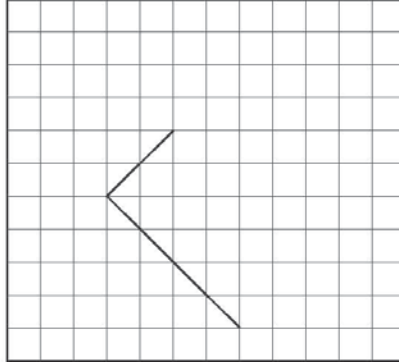
A

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Here are two sides of a rectangle. Draw the other two sides.



M041146

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TIMSS2007**Mathematics****Fourth Grade****Content Domain**Geometric Shapes
and Measures**Cognitive Domain**

Applying

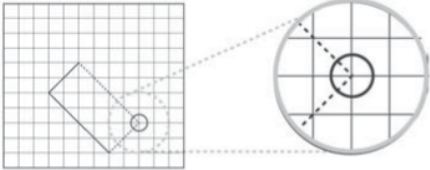
Maximum Points

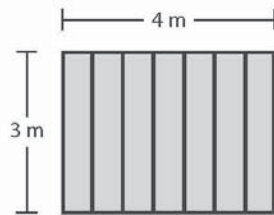
1

Key

See scoring guide

**TIMSS & PIRLS**
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Code	Response	Item: M041146
	Correct Response	
10	<p>Correct rectangle drawn with the fourth vertex lying within the circle, as shown below. Note: The center of the circle is the correct position for the vertex. The radius of the circle is half the length of a square on the grid.</p>	
		
	Incorrect Response	
79	Incorrect (including crossed out, erased, stray marks, illegible, or off task)	
	Nonresponse	
99	Blank	



Patrick is painting one side of a fence. The fence is 4 meters long and 3 meters high. What is the area that Patrick has to paint?

- (A) 4 square meters
- (B) 7 square meters
- (C) 12 square meters
- (D) 14 square meters

M041152

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TIMSS2007**Mathematics**
Fourth Grade**Content Domain**Geometric Shapes
and Measures**Cognitive Domain**

Applying

Maximum Points

1

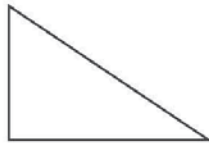
Key

C

**TIMSS & PIRLS**
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Two shapes are shown below. Describe one way they are the same and one way they are different.

Shape P



Shape Q



A. Same

B. Different

M041258

TIMSS2007**Mathematics****Fourth Grade****Content Domain**Geometric Shapes
and Measures**Cognitive Domain**

Reasoning

Maximum Points

1

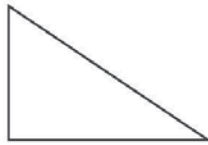
Key

See scoring guide

Code	Response	Item: M041258A
	Correct Response	
10	Both are triangles/ both have 3 sides/ both have same number of sides/ both have 3 angles/ both have 3 corners or equivalent statements	
	Incorrect Response	
70	They are the same shape.	
71	Both have straight sides.	
79	Other incorrect (including crossed out, erased, stray marks, illegible, or off task)	
	Nonresponse	
99	Blank	

Two shapes are shown below. Describe one way they are the same and one way they are different.

Shape P



Shape Q



A. Same

B. Different

M041258

TIMSS2007**Mathematics****Fourth Grade****Content Domain**Geometric Shapes
and Measures**Cognitive Domain**

Reasoning

Maximum Points

1

Key

See scoring guide

Code	Response	Item: M041258B
	Correct Response	
10	One has a right angle, one does not.	
11	One has 2 sides/ angles the same size/is isocetes/has a line of symmetry (the other does not)	
12	One is bigger/longer/wider/has a larger area than the other or equivalent statement about size.	
	Incorrect Response	
70	They are different shapes/ they are not the same shape.	
79	Other incorrect (including crossed out, erased, stray marks, illegible, or off task)	
	Nonresponse	
99	Blank	



The man in the picture is 2 meters tall. Estimate the height of the tree.

- (A) 4 meters
- (B) 6 meters
- (C) 8 meters
- (D) 10 meters

M041131

TIMSS2007**Mathematics****Fourth Grade****Content Domain**Geometric Shapes
and Measures**Cognitive Domain**

Knowing

Maximum Points

1

Key

C

TIMSS 2007

Mathematics

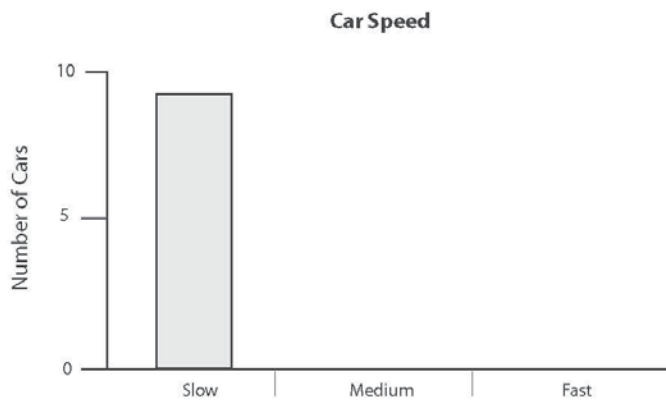
Fourth Grade

Several students were collecting information about how fast cars were driving by their school. The table below shows the results for 20 cars.

Car	Slow	Medium	Fast
1		X	
2	X		
3	X		
4			X
5			X
6	X		
7		X	
8		X	
9	X		
10	X		
11	X		
12		X	
13	X		
14			X
15			X
16	X		
17		X	
18	X		
19		X	
20			X

To make the results easier to read, the students started to put the information into the bar graph.

Complete the bar graph.



M041275

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Content Domain

Data Display

Cognitive Domain

Applying

Maximum Points

2

Key

See scoring guide




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Code	Response	Item: M041275
	Correct Response	
20	Both bars correctly drawn. Bar for fast is between 4 and 6 (inclusive). Bar for medium is taller than bar for fast but less than 7.5 (exclusive).	
	Partially Correct Response	
10	Only 1 bar correctly drawn	
	Incorrect Response	
79	Incorrect (including crossed out, erased, stray marks, illegible, or off task)	
	Nonresponse	
99	Blank	

TIMSS2007

Mathematics
Fourth Grade

The graph shows the number of apples John picked each day.

each  stands for 10 apples

Monday	
Tuesday	
Wednesday	
Thursday	

On which day did John pick 5 apples?

- (A) Monday
- (B) Tuesday
- (C) Wednesday
- (D) Thursday

M041186

Content Domain

Data Display

Cognitive Domain

Knowing

Maximum Points

1

Key

D

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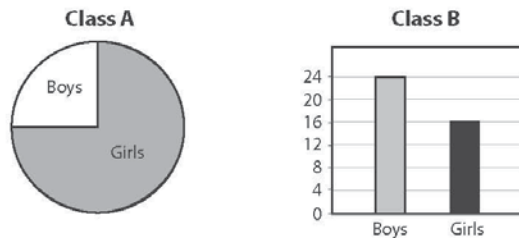
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TIMSS2007

Mathematics

Fourth Grade

Class A and B each have 40 students.



There are more girls in Class A than in Class B. How many more?

- (A) 14
- (B) 16
- (C) 24
- (D) 30

M041336

Content Domain

Data Display

Cognitive Domain

Reasoning

Maximum Points

1

Key

A

There are 9 rows of chairs. There are 15 chairs in each row. Which of these gives the total number of chairs?

- (A) $15 \div 9$
- (B) $15 - 9$
- (C) 15×9
- (D) $15 + 9$

M031303

TIMSS2007**Mathematics****Fourth Grade****Content Domain**

Number

Cognitive Domain

Applying

Maximum Points

1

Key

C

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TIMSS & PIRLS
International Study Center
Lynch School of Education, Boston College

TIMSS 2007

Mathematics Fourth Grade

A piece of rope 204 cm long is cut into 4 equal pieces. What is the length of each piece?

Answer: _____ cm

M031309

Content Domain

Number

Cognitive Domain

Applying

Maximum Points

1

Key

See scoring guide



Code	Response	Item: M031309
	Correct Response	
10	51	
	Incorrect Response	
79	Incorrect (including crossed out/erased, stray marks, illegible, or off task)	
	Nonresponse	
99	Blank	

$$12 \div 3 = \blacksquare \div 2$$

In this number sentence, what number does \blacksquare stand for?

- (A) 2
- (B) 4
- (C) 6
- (D) 8

M031245

TIMSS2007**Mathematics****Fourth Grade****Content Domain**

Number

Cognitive Domain

Applying

Maximum Points



1

Key

D



Posters for two sports clubs that rent bikes are shown below.

<p>Mountain Bike Rentals</p> <p>8 zeds for 1st hour 3 zeds for each additional hour</p> 	<p>Roadrace Bike Rentals</p> <p>10 zeds for 1st hour 2 zeds for each additional hour</p> 
--	--

A. Use the information in the posters to complete the tables.

Mountain Bike Rentals	
Hours	Cost (zeds)
1	8
2	11
3	
4	
5	
6	

Roadrace Bike Rentals	
Hours	Cost (zeds)
1	10
2	12
3	
4	
5	
6	

B. For what number of hours are the rental costs the same at the two clubs?

Answer: _____

C. From which club does it cost less to rent a bike for 12 hours?

- (A) Mountain Bike Rentals
 (B) Roadrace Bike Rentals
 (C) They are both the same
 (D) It cannot be worked out

M031242

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Content Domain
 Number

Cognitive Domain
 Applying

Maximum Points



1

Key

See scoring guide

Code	Response	Item: M031242A			
	Correct Response				
10	Table completed correctly to 6 hours:	3 hours	14 zeds	3 hours	14 zeds
		4	17	4	16
		5	20	5	18
		6	23	6	20
	Incorrect Response				
70	One or more entries for Mountain Club incorrect; Roadrace Club entries all correct				
71	One or more entries for Roadrace Club incorrect; Mountain Club entries all correct				
79	Other incorrect (including crossed out/erased, stray marks, illegible or off task).				
	Nonresponse				
99	Blank				

Posters for two sports clubs that rent bikes are shown below.

Mountain Bike Rentals	Roadrace Bike Rentals
8 zeds for 1st hour 3 zeds for each additional hour	10 zeds for 1st hour 2 zeds for each additional hour
	

A. Use the information in the posters to complete the tables.

Mountain Bike Rentals		Roadrace Bike Rentals	
Hours	Cost (zeds)	Hours	Cost (zeds)
1	8	1	10
2	11	2	12
3		3	
4		4	
5		5	
6		6	

B. For what number of hours are the rental costs the same at the two clubs?

Answer: _____

C. From which club does it cost less to rent a bike for 12 hours?

- (A) Mountain Bike Rentals
 (B) Roadrace Bike Rentals
 (C) They are both the same
 (D) It cannot be worked out

M031242

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Content Domain
Data Display

Cognitive Domain
Knowing

Maximum Points

1

Key
See scoring guide

Code	Response	Item: M031242B
	Correct Response	
10	3 (as long as does not contradict Part A including table empty or incomplete).	
11	Number(s) correct according to a complete but erroneous table in Part A OR indicates no match according to a complete but erroneous table in Part A.	
	Incorrect Response	
79	Incorrect (including crossed out/erased, stray marks, illegible or off task).	
	Nonresponse	
99	Blank	


Mathematics
Fourth Grade

Posters for two sports clubs that rent bikes are shown below.

Mountain Bike Rentals
8 zeds for 1st hour
3 zeds for each additional hour



Roadrace Bike Rentals
10 zeds for 1st hour
2 zeds for each additional hour



A. Use the information in the posters to complete the tables.

Mountain Bike Rentals	
Hours	Cost (zeds)
1	8
2	11
3	
4	
5	
6	

Roadrace Bike Rentals	
Hours	Cost (zeds)
1	10
2	12
3	
4	
5	
6	

B. For what number of hours are the rental costs the same at the two clubs?

Answer: _____

C. From which club does it cost less to rent a bike for 12 hours?

- (A) Mountain Bike Rentals
- (B) Roadrace Bike Rentals
- (C) They are both the same
- (D) It cannot be worked out

M031242

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Content Domain
Data Display

Cognitive Domain
Reasoning

Maximum Points

1

Key

B

TIMSS 2007**Mathematics****Fourth Grade**

A man took his 3 children to a fair. Tickets cost twice as much for adults as for children. The father paid a total of 50 zeds for the 4 tickets.

How many zeds did each child's ticket cost? Show your work.

Answer: _____

M031247

Content Domain

Number

Cognitive Domain

Reasoning

Maximum Points

2

Key

See scoring guide



Code	Response	Item: M031247
	Correct Response	
20	10 or 10 zeds with work shown:	
	Partial Response	
10	10 or 10 zeds with no work shown	
11	Correct method but computation error	
	Incorrect Response	
70	$\frac{50}{4}$ or 12.5	
79	Other incorrect (including crossed out/erased, stray marks, illegible or off task).	
	Nonresponse	
99	Blank	

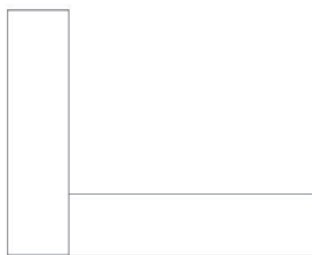
TIMSS2007

Mathematics
Fourth Grade

Jill had a rectangular piece of paper.



She cut her paper along the dotted line and made an L shape like this.



Which of these statements is true?

- (A) The area of the L shape is greater than the area of the rectangle.
- (B) The area of the L shape is equal to the area of the rectangle.
- (C) The area of the L shape is less than the area of the rectangle.
- (D) You cannot work out which area is greater without measuring.

M031219

Content Domain

Geometric Shapes
and Measures

Cognitive Domain

Knowing

Maximum Points

1

Key

B

Maria has 6 red boxes. Each red box has 4 pencils inside. She also has 3 blue boxes. Each blue box has 2 pencils inside. How many pencils does Maria have altogether?

- (A) 6
- (B) 15
- (C) 24
- (D) 30

M031173

TIMSS2007**Mathematics****Fourth Grade****Content Domain**

Number

Cognitive Domain

Applying

Maximum Points

1

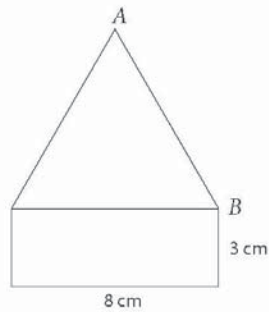
Key

D

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The figure above is made from a rectangle and a triangle with three equal sides. What is the length, in centimeters, of side AB ?

- (A) 8
- (B) 9
- (C) 10
- (D) 11

M031085

TIMSS2007**Mathematics****Fourth Grade****Content Domain**Geometric Shapes
and Measures**Cognitive Domain**



Knowing

Maximum Points

1


Key

A

Street	Number of houses
Main	
Center	
First	
Hill	

Mary is making a chart to show the number of houses on some streets.

Every  stands for 5 houses. There are 20 houses on Hill Street.

How many  should Mary put in the chart beside Hill Street?

- (A) 4
- (B) 5
- (C) 15
- (D) 20

M031172

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TIMSS2007

Mathematics

Fourth Grade

Content Domain
Data Display

Cognitive Domain
Applying

Maximum Points
1

Key
A



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$$\frac{4}{5} - \frac{1}{5} =$$

- (A) $\frac{3}{5}$
- (B) $\frac{3}{10}$
- (C) $\frac{3}{25}$
- (D) 3

M031029

TIMSS2007**Mathematics****Fourth Grade****Content Domain**

Number

Cognitive Domain

Knowing

Maximum Points

1

Key

A



$12.36 - 9.7 =$

Answer: _____

M031030

TIMSS2007**Mathematics**
Fourth Grade**Content Domain**

Number

Cognitive Domain

Knowing

Maximum Points

1

Key

See scoring guide

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Code	Response	Item: M031030
	Correct Response	
10	2.66	
	Incorrect Response	
70	3.29	
79	Other incorrect (including crossed out/erased, stray marks, illegible, or off task)	
	Nonresponse	
99	Blank	

Which of these numbers is closest in size to 10?

- (A) 0.10
- (B) 9.99
- (C) 10.10
- (D) 10.90

M031332

TIMSS2007**Mathematics****Fourth Grade****Content Domain**

Number

Cognitive Domain

Knowing

Maximum Points

1

Key

B

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TIMSS2007**Mathematics****Fourth Grade**

The first four terms in a number pattern are shown below.

2, 4, 8, 16, ...

What is the next number in the pattern?

- (A) 24
- (B) 30
- (C) 32
- (D) 64

M031098

Content Domain

Number

Cognitive Domain

Applying

Maximum Points

1

Key

C



A shelf is 240 cm long. Chris is putting boxes on the shelf. Each box takes up 20 cm of shelf space. Which of these number sentences shows how many boxes Chris can fit on the shelf? The number of boxes is shown as ▲.

- (A) $240 - 20 = \blacktriangle$
(B) $240 \div 20 = \blacktriangle$
(C) $240 + 20 = \blacktriangle$
(D) $240 \times 20 = \blacktriangle$

M031254

TIMSS2007**Mathematics****Fourth Grade****Content Domain**

Number

Cognitive Domain

Applying

Maximum Points

1

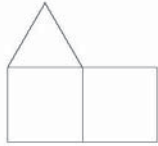
Key

B

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Rita



Ina



Lana

Rita, Ina, and Lana take turns arranging 3 tiles. Each arranges the tiles in a different shape as shown above. Which of the following is true about the area of the shapes?

- (A) Rita's shape has a greater area than the others.
- (B) Ina's shape has a greater area than the others.
- (C) Lana's shape has a greater area than the others.
- (D) All of the shapes have the same area.

M031038

TIMSS2007

Mathematics Fourth Grade

Content Domain

Geometric Shapes
and Measures

Cognitive Domain

Knowing

Maximum Points

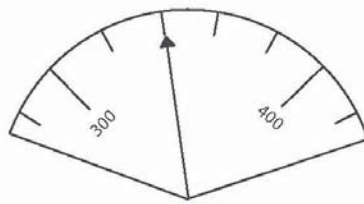
1

Key

D

TIMSS2007

Mathematics Fourth Grade



On the scale above, what number does the pointer indicate?

- (A) 302
- (B) 310
- (C) 320
- (D) 340

M031276

Content Domain
Number

Cognitive Domain
Knowing

Maximum Points
1

Key
D

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John is going to bake biscuits. He has to heat up the oven for 10 minutes, then bake the biscuits for 12 minutes. John wants to finish baking the biscuits at 11:00. What is the latest he should turn on the oven?

- (A) 10:38
- (B) 10:48
- (C) 10:50
- (D) 11:22

M031064

TIMSS2007**Mathematics****Fourth Grade****Content Domain**

Number

Cognitive Domain

Reasoning

Maximum Points

1

Key

A



TIMSS2007

Mathematics

Fourth Grade

Chris has lots of tiles like this:



Julio has lots of tiles like this:



Pierre has lots of tiles like this:



Ben has lots of tiles like this:



Who would need the least number of tiles to cover a classroom floor with his tiles?

- (A) Chris
- (B) Julio
- (C) Pierre
- (D) Ben

M031006

Content Domain

Geometric Shapes
and Measures

Cognitive Domain

Knowing

Maximum Points

1

Key

B

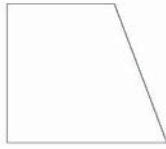
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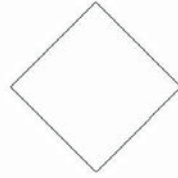
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TIMSS2007**Mathematics****Fourth Grade**

P



Q



R



S



T



U

List the letters of all the shapes that are triangles.

Answer: _____

M031330

Content DomainGeometric Shapes
and Measures**Cognitive Domain**

Knowing

Maximum Points

1

Key

See scoring guide

Item ID

M031330

Subject

M

Grade

4

Block

M07

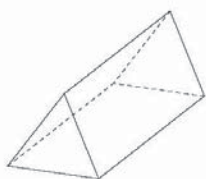
Block Seq

10

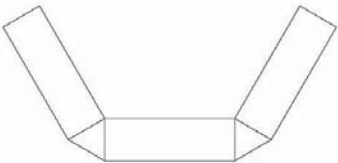

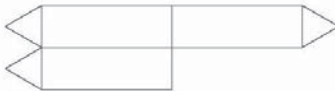
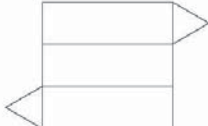
Code	Response	Item: M031330
	Correct Response	
10	P, S, and U only	
	Incorrect Response	
79	Incorrect (including crossed out/erased, stray marks, illegible, or off task)	
	Nonresponse	
99	Blank	

TIMSS 2007

Mathematics
Fourth Grade



Which of these could be folded to make a shape like the 3-D figure above?

- (A) 
- (B) 
- (C) 
- (D) 

M031351

Content Domain

Geometric Shapes and Measures

Cognitive Domain

Applying

Maximum Points

1

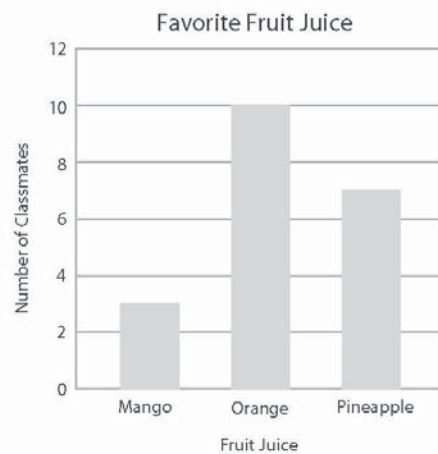
Key

D

TIMSS2007

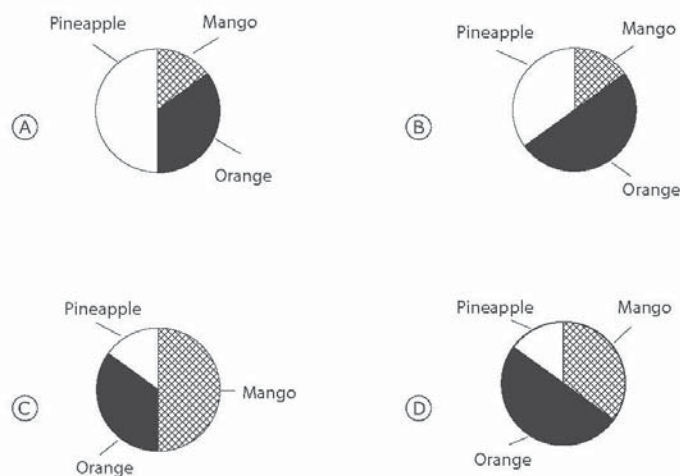
Mathematics

Fourth Grade



Lena asked her 20 classmates if they like orange, mango, or pineapple juice the best. She shows her data in the bar graph above.

She also drew a pie chart using the same data. Which of the following is the pie chart for this data?



M031135

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Content Domain

Data Display

Cognitive Domain

Reasoning

Maximum Points

1

Key

B



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