Arizona's Instrument to Measure Standards (AIMS HS)

Mathematics

Released Items

November 15, 2007

Arizona Department of Education

As part of Superintendent Tom Horne's ongoing efforts to improve the communication of academic expectations, the Arizona Department of Education is releasing High School reading, writing, and mathematics items to the public. This release is intended to provide students, parents, teachers, and the community with specific examples of the types of skills being assessed on the AIMS tests. The release is divided into a writing/reading form and a mathematics form, similar to the AIMS test.

Included in this release is a previous prompt and directions used in the AIMS assessments. Following the writing prompt are two reading passages, directions, and the items associated with each passage in the form of a mini-test. These passages and items are from the 2002, 2005, and 2007 AIMS administrations. The final section will contain the individual items with the correct answers and statistical information about each item.

The mathematics section consists of a mini-test with thirty items from the 2002 through 2007 AIMS administrations, followed by the individual items and their statistics.

The statistical information provided includes:

- 1) item identification number;
- 2) correct answer;

3) response probability (P-Value), which represents the percentage of students who answered the question correctly;

4) Rasch difficulty, which measures the difficulty of the item on a scale in which -3 indicates a very easy item and +3 indicates an extremely difficult item; and

5) performance objective as the item aligns to the 2003 standards.

The items are reproductions of the actual items as they appeared on the AIMS tests. If you have any questions, please contact Frank Brashear, Director of Test & Item Development, at (602) 542-5031.

AIMS Mathematics Released Items for 2007

MATHEMATICS

Mathematics -

DIRECTIONS: Read each question and choose the best answer.

1. If a figure is rotated, which of the following characteristics of the figure is preserved?

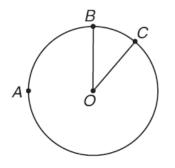
- I. angle measures
- II. perimeter
- III. area
- A I and II
- **B** II and III
- C I and III
- **D** I, II, and III
- 2. What is the value of the expression below?

$$|-2| - |4| + |3 - 10|$$

A -9
B -1
C 5
D 13

- 3. Which of the following is an infinite set?
 - A integers between −5 and 10
 - **B** whole numbers between -5 and 10
 - **C** natural numbers between -5 and 10
 - **D** rational numbers between -5 and 10

4. Points A, B, and C lie on circle O, as shown below.



What is the measure of $\angle BOC$ if the measure of arc *BAC* is 320°?

- **A** 40°
- **B** 80°
- **C** 160°
- **D** 320°
- 5. Which is the solution to the inequality $2x 3 \ge -4x + 2$?
 - **A** $x \ge \frac{1}{2}$ **B** $x \le \frac{1}{2}$ **C** $x \ge \frac{5}{6}$ **D** $x \le \frac{5}{6}$

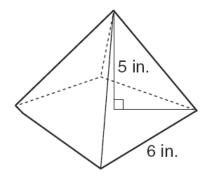
6. In order to plan her budget, Jazmin created a chart of her expenses for three months. After paying her bills and setting aside her savings, she spends what is left for entertainment and miscellaneous expenses.

	MONTHLY BUDGET										
Wages	Month	P. ar	Gasoling	Car Ins.	Savinoc Savinoc	Entertaining	nicellene				
\$489	May	213	56	67	75	78					
\$511	June	213	64	67	75	92					
\$504	July	213	49	67	75	100					

Which of the following is true?

- A Jazmin's wages vary monthly.
- B Jazmin has \$100 each month to spend for entertainment.
- C Jazmin's gas expenses have been consistently decreasing.
- D Jazmin's car payment is over 50% of her wages.
- 7. Lee wants to make a sandwich. He has 5 types of meat, 3 types of cheese, and 2 types of sandwich spreads. If Lee chooses 1 meat, 1 cheese, and 1 sandwich spread, how many different combinations are possible for his sandwich?
 - **A** 10
 - **B** 13
 - **C** 30
 - **D** 33

8. The right square pyramid represented below has a base edge of 6 inches and a height of 5 inches.

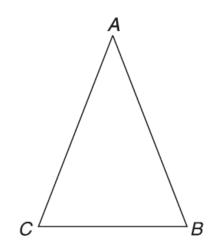


What is the volume in cubic inches of the pyramid?

- **A** 60
- **B** 90
- C 120
- **D** 180
- **9.** Sean is selecting an outfit from among 2 pairs of pants, 4 shirts, and 3 pairs of shoes. How many different outfits consisting of 1 pair of pants, 1 shirt, and 1 pair of shoes are possible?
 - **A** 9
 - **B** 12
 - **C** 24
 - **D** 36

- **10.** Which set contains an irrational number?
 - **A** $\left\{2300, 0.48, \frac{13}{1}\right\}$
 - **B** $\left\{ 18, 0.1, \frac{12}{5} \right\}$
 - **c** $\left\{\frac{3}{8}, 4, \sqrt{52}\right\}$

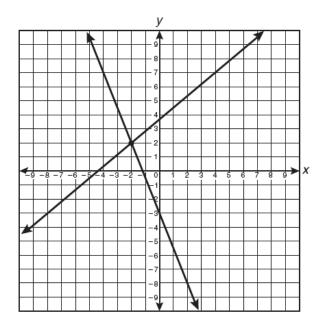
11. Figure *ABC* is an isosceles triangle with base \overline{BC} .



Which is a true statement about $\triangle ABC$?

- $\mathbf{A} \quad \angle A \cong \angle B$
- **B** $\overline{AC} \cong \overline{AB}$
- **C** $\overline{AC} \cong \overline{CB}$
- $\mathbf{D} \quad \angle C \cong \angle A$

12. What is the apparent solution to the system of equations graphed below?



- **A** (−2, −2)
- **B** (−2, 2)
- **C** (2, −2)
- **D** no solution

- 13. Joe has \$20.00. A six-pack of soda costs \$1.89, including tax. What is the greatest number of six-packs of soda he can buy?
 - **A** 5
 - **B** 10
 - **C** 15
 - **D** 20

- 14. Determine the slope m, x-intercept, and y-intercept of the equation 5x - 2y = 10.
 - A slope $m = \frac{5}{2}$ x-intercept = (2, 0) y-intercept = (0, -5)
 - **B** slope $m = -\frac{5}{2}$ x-intercept = (2, 0) y-intercept = (0, -5)
 - **c** slope $m = \frac{2}{5}$ x-intercept = (-5, 0) y-intercept = (0, 2)
 - **D** slope $m = -\frac{2}{5}$ x-intercept = (-5, 0) y-intercept = (0, 2)

- 15. What is the *y*-intercept of the graph of the equation 3x + 6y = 18?
 - A −6
 B −3
 C 3
 - **D** 6

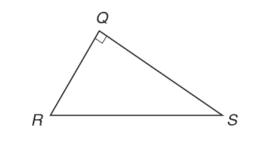
- 16. A pattern is described below.
 - The first term is 2.
 - The second term is 7.
 - Each term after the second is found by adding 5 to the immediately preceding term.

What is the fifth term in this pattern?

A 5B 12

- **C** 17
- **D** 22

17. Which of the following must be true for $\triangle QRS$?



- $\mathbf{A} \quad QR + RS = QS$
- $\mathbf{B} \quad QR + QS < RS$
- **C** QS + RS > QR
- **D** QR RS = QS

18. The math club sold candy bars as a fundraiser. The number of candy bars sold by each member is shown below.

65	76	100	67	44	94	71
69	88	80	63	75	82	62

Which frequency chart accurately represents the data?

# of Candy Bars Sold	Frequency
40-49	1
50-59	1
60-69	3
70-79	3
80-89	5
90—99	0
100-109	1



# of Candy Bars Sold	Frequency
40-49	0
50-59	1
60-69	5
70–79	4
80-89	3
90—99	1
100-109	1

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# of Candy Bars Sold	Frequency					
40-49	2					
50-59	0					
60-69	5					
70-79	3					
80-89	2					
90-99	1					
100-109	1					
В						

# of Candy Bars Sold	Frequency
40-49	1
50-59	0
60-69	5
70-79	3
80-89	3
90—99	1
100-109	1
	D

19. If x = 4 and y = -1, what is the value of the expression below?

> Α 0 √5 В √14 С 4 D

Arizona Department of Education

 $\sqrt{2x-8y}$

- 20. Which of the following is an example of independent events?
 - A flipping a fair coin and rolling a six-sided number cube
 - **B** selecting the order in which one picture will be taken of each of four friends by drawing their names out of a hat
 - C selecting the order in which each member of a history class will present a speech to the rest of the class
 - D selecting two different-flavored pieces of candy, one piece at a time, from a bag containing four different flavors of candy
- 21. Which of the following equations represents the line that passes through the points (2, -6) and (-4, 3)?

A
$$y = -\frac{3}{2}x - 7$$

B
$$y = -\frac{2}{3}x - 3$$

c
$$y = -\frac{3}{2}x - 3$$

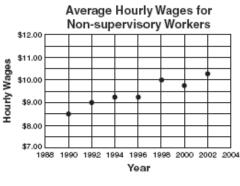
D
$$y = -\frac{2}{3}x + \frac{1}{3}$$

- 22. The class wants to order pizza for a study session. There are 3 different vegetable toppings, 3 different meat toppings, and 2 types of crust available. How many different pizzas are possible with 1 vegetable topping, 1 meat topping, and 1 type of crust?
 - **A** 6
 - **B** 8
 - **C** 12
 - **D** 18

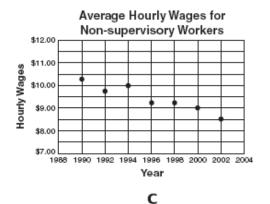
23. The table below shows the average hourly wages for non-supervisory workers for the years 1990–2002. Which scatter plot most accurately shows this information?

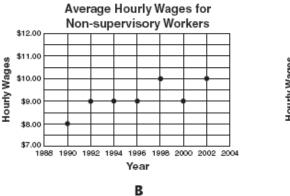
· ·	<u> </u>		· ·		<u> </u>		
Year	1990	1992	1994	1996	1998	2000	2002
Average Hourly Wage	\$8.50	\$9.00	\$9.25	\$9.25	\$10.00	\$9.75	\$10.25

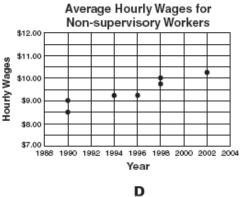




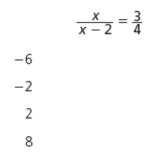








24. For what value of x is the proportion below true?



A

В

С

D

- 25. Maria took a taxicab from her home to the theater downtown. The taxicab company charges a flat fee of \$5.00 plus \$0.25 per mile. Which equation represents C, the total cost of her ride, in terms of m, the length of the trip in miles?
 - A C = 0.25m
 - **B** C = 5.25m
 - **C** C = 5 + 0.25m
 - **D** C = 5m + 0.25

26. What is the solution to the equation below?

$$3(x-4)=5x-6$$

A
$$x = -3$$

B $x = \frac{3}{4}$
C $x = 1$
D $x = 9$

27. The sequence below is defined by starting with 1, then adding 2 to the immediately preceding term. What is the 10th term of the sequence if the pattern continues?

1, 3, 5, 7, 9, . . .

- **A** 9
- **B** 11
- **C** 19
- **D** 21
- **28.** What is the solution to the equation below?

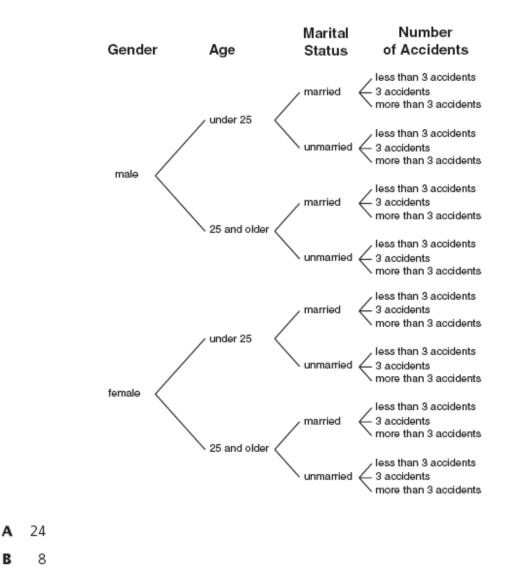
$$\frac{x}{4} = \frac{x+1}{3}$$

- **A** x = -4
- **B** *x* = −1
- **C** $x = \frac{1}{7}$
- **D** $x = \frac{4}{7}$
- **29.** Which property of real numbers is illustrated below?

$$x(y+z) = xy + xz$$

- A Associative Property of Addition
- **B** Associative Property of Multiplication
- **C** Distributive Property
- **D** Commutative Property of Multiplication

30. An insurance actuary used the tree diagram below to help categorize drivers by gender, age, marital status, and accident history. Based on the diagram, how many combinations of gender, age, marital status, and number of accidents are possible?





В

С

D

6

3

Item					Item	Data				
	Item	3015124	Correct	D	P-Value	.711	Equated Rasch Value	-0.2511		
1	Number		Answer				-			
_	2003 Mathem	natics Standa	ard Alignm	ent is	Strand 4 -	Concept	2 – Performance Objecti	ve 6		
	If a figure is rotated, which of the following characteristics of the figure is preserved?									
	I. a	ngle measur	es							
		erimeter								
	III. a									
	A I	and II								
	B II	I and III								
	CI	and III								
	D L	II, and III								
	1		~	~				0.700/		
	Item	3140727	Correct	С	P-Value	.53	Equated Rasch Value	0.5381		
2	Number		Answer		Steen d 1	Canaant	2 Doufournou og Obiosti			
	2003 Mathematics Standard Alignment is Strand 1 – Concept 2 – Performance Objective 3									
	WI	hat is the va	lue of the	expr	ession belov	<i>v</i> 9				
					2551011 00107	· .				
		-2 -	4 + 3 -	10						
	Α	-9								
	В	-1								
	С	5								
		13								
	D	15								
	T .	2261711	<u>a</u>	D	D V 1	25		2.0274		
2	Item Number	3261711	Answer	D	P-Value	.35	Equated Rasch Value	2.0274		
3		natics Stands		ent is	Strand 1 -	Concept	1 – Performance Objecti	ve 3		
	2005 Mathem	intes Stand	ard 7 mgmm		Strand I	concept	I Terrormanee Objecti			
	W	hich of the	e followin	g is a	an infinite	set?				
	Α	integers	oetween -	-5 ar	nd 10					
	В	whole nu	Imbers bet	weer	n —5 and 1	0				
	С	natural n	umbers be	etwee	en –5 and ′	10				
	D	rational r	numbers b	etwe	en —5 and	10				

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	Item	3261727	Correct	А	P-Value	.75	Equated Rasch Value	-0.22	241
4	Number		Answer						
-	2003 Mather	matics Standa	ard Alignm	ent is	Strand 4 -	Concept	1 – Performance Object	ive 7	
	Points A, B, and C lie on circle O, as shown below. $ \frac{B}{A + C} $ What is the measure of $\angle BOC$ if the								
		measure of A 40°	arc BAC i	s 320)°?				
		B 80°							
		C 160°							
		D 320°							
		520							
5	Item Number	3267505	Correct Answer	С	P-Value	.58	Equated Rasch Value	0.73	71
	2003 Mather	matics Standa	ard Alignm	ent is	Strand 3 –	Concept	3 – Performance Object	ive 9	
	2: A B	/hich is the $x - 3 \ge -4$, $x \ge \frac{1}{2}$ $x \le \frac{1}{2}$ $x \ge \frac{5}{6}$ $x \le \frac{5}{6}$		o th	e inequalit	у			

	Item	3140848 Corre		P-Value	.72	Equated Deceb Value	-0.4598			
6	Number	Ansv		r - v alue	.72	Equated Rasch Value	-0.4398			
U				Strand 2 –	Concept	1 – Performance Object	ive 9			
	In or payin	der to plan her budg	ng aside h	n created a ch	A BUDGET	xpenses for three months. A vhat is left for entertainment	fter			
	AJ BJ CJ									
7	Item Number	3261154 Corre Answ	ver	P-Value	.79	Equated Rasch Value 3 – Performance Object	-0.2085			
	Le h ai If ai d	ee wants to make as 5 types of mea nd 2 types of san Lee chooses 1 m nd 1 sandwich sp ifferent combina or his sandwich?	e a sandv it, 3 type dwich sp eat, 1 ch read, ho	wich. He es of cheese oreads. eese, w many						
	A	10								
	В									
	C	30								
	D	33								

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	Item	3140888	Correct	A P-Val	ue .48		Equated Rasch Value	0.6234	
8	Number		Answer						_
	2003 Mathe	matics Standa	ard Alignme	ent is Strand	4 - Cond	cept	4 – Performance Object	ive 2	
		The right squ has a base ec 5 inches. What is the v the pyramid? A 60 B 90	are pyrami lge of 6 inc 5 i 5 i	d represente hes and a he	d below ight of				
		C 120							
		D 180							
9	Item Number 2003 Mathe	3261155 matics Standa	Answer	C P-Val ent is Strand			Equated Rasch Value 3 – Performance Object	-0.1366 ive 1	
		Sean is sele 2 pairs of p of shoes. H consisting and 1 pair	oants, 4 shi ow many o of 1 pair o	rts, and 3 p different ou f pants, 1 sl	airs itfits iirt,				
		A 9							
		B 12							
		C 24							
		D 36							
	I								

	Tt	2261150	Connect			•	Emister Decel Value	1.0702				
10	Item Number	3261159	Correct Answer	С	P-Value	.32	Equated Rasch Value	1.9703				
10		natics Stand		ent is	Strand 1 _	Concept	1 – Performance Object	ive 1				
	2003 Mathematics Standard Alignment is Strand 1 – Concept 1 – Performance Objective 1											
	Which set contains an irrational											
	number?											
	A $\left\{2300, 0.48, \frac{13}{1}\right\}$											
	B $\left\{18, 0.1, \frac{12}{5}\right\}$											
		c $\left\{\frac{3}{8}, 4, \right\}$	<u></u>									
		D {0.333										
		_ (0.000	, ү . ,									
	Item	3015223	Correct	В	P-Value	.86	Equated Rasch Value	-0.9012				
11	Number		Answer									
	2003 Mather	natics Standa	ard Alignm	ent is	s Strand 4 –	Concept	1 – Performance Object	ive 1				
		igure ABC		celes	triangle							
	v	with base <i>B</i>	BC.									
			A									
			\wedge									
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			/	\backslash								
			/									
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		/										
		C └─			`B							
	١	Nhich is a t	rue state	men	t							
	â	about $\triangle ABC$?										
	4	$A \angle A \cong \Box$	∠B									
		B $\overline{AC} \cong \overline{A}$	B									
		$\overline{AC} \cong \overline{C}$	B									
	r) ∠C ≅ ∠	Λ									
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		AIMS Mathematics Released Items for 2007											
	Item	3140700 Correct B P-Value .75 Equated Rasch Value -0.2004											
10	Number	Answer											
12	2003 Mather	atics Standard Alignment is Strand 4 – Concept 3 – Performance Objective 4											
	-												
		What is the apparent solution to the system of equations graphed below?											
	system of equations graphed below?												
		$9 - 8 - 7 - 6 - 5 - 4 - 3 - 2 - 1 0 + 2 - 3 + 5 - 6 - 7 - 8 - 9 \rightarrow X$											
		A (-2, -2)											
		B (-2, 2)											
		C (2, -2)											
		D no solution											
	T												
10	Item	3140642 Correct B P-Value .82 Equated Rasch Value -1.1396											
13	Number	Answer Answer atics Standard Alignment is Strand 1 – Concept 2 – Performance Objective 2											
	2005 Mather	and standard Angninent is strand \mathbf{I} – Concept \mathbf{Z} – Performance Objective \mathbf{Z}											
		has \$20.00 A given and of and a											
		be has \$20.00. A six-pack of soda											
		osts \$1.89, including tax. What is the											
		reatest number of six-packs of soda											
	1	e can buy?											
		5											
		10											
		15											
		20											

		Anvis Mamematics Released Items for 2007											
	Item	2019624CorrectAP-Value.411Equated Rasch Value1.3714											
14	Number	Answer											
	2003 Mather	natics Standard Alignment is Strand 3 – Concept 4 – Performance Objective 1											
		Determine the slope <i>m</i> , <i>x</i> -intercept,											
		and y-intercept of the equation											
		5x - 2y = 10.											
		A slope $m = \frac{5}{2}$											
		x-intercept = $(2, 0)$											
		y-intercept = $(0, -5)$											
		B slope $m = -\frac{5}{2}$											
		x-intercept = $(2, 0)$											
		y-intercept = $(0, -5)$											
		c slope $m = \frac{2}{5}$											
		x-intercept = $(-5, 0)$											
		y-intercept = (0, 2)											
		D slope $m = -\frac{2}{5}$											
		x-intercept = $(-5, 0)$											
		y-intercept = (0, 2)											
	Item	3015151 Correct C P-Value .60 Equated Rasch Value 0.5652											
15	Number	Answer Answer											
15		natics Standard Alignment is Strand 3 – Concept 4 – Performance Objective 1											
	2003 Mathen	hates Standard Auginient is Strand 5 Concept 4 Terrormanee Objective 1											
		What is the y-intercept of the graph of the equation $3x + 6y = 18$?											
		A -6											
		B −3											
		C 3											
		D 6											
·													

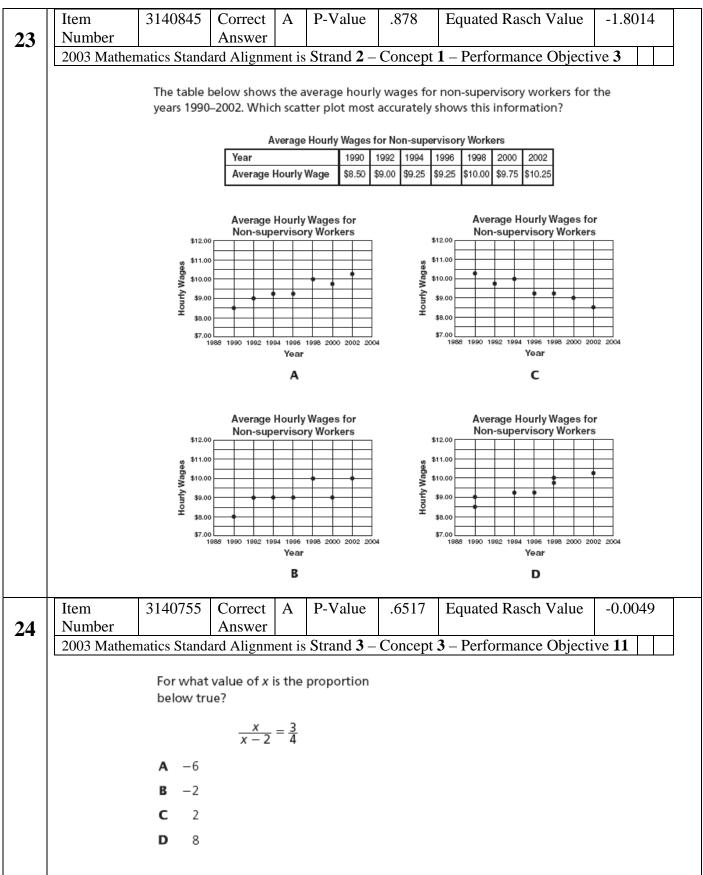
AIMS Mathematics Released Items for 2007

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16	Item Number	3267518	Correct Answer	D	P-Value	.83	Equated Rasch Value	-0.954					
16		matics Standa		ent is	Strand 3 –	Concept	1 – Performance Object	ive 2	-				
		 A pattern is described below. The first term is 2. The second term is 7. Each term after the second is found by adding 5 to the immediately preceding term. 											
			ne fifth tei	rm in	this patte	rn?							
		A 5 B 12											
		C 17											
		D 22											
17	Item Number	3140881	Correct Answer	C	P-Value	.61	Equated Rasch Value	0.3271					
	2003 Mather	matics Standa	ard Alignmo	ent is	Strand 4 –	Concept	1 – Performance Object	ive 9					
		Which o	f the follo	owin	g must be	true							
		for $\triangle QR$			9								
			Q										
			\sim										
			/			C							
		R '				S							
		A QR -	+ RS = QS	5									
		B QR -	+ QS < RS	5									
		\mathbf{C} QS -	+ RS > QF	?									
			-RS = QS										
			N3 – Q3	,									

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	_	•				Clease	ed Items to	1 2007		
	Item	2019589	Correc	t D	P-Value	.86	Equate	ed Rasch Valu	ue -1.3102	
18	Number		Answe	er						
10	2003 Mather	natics Stand	ard Align	ment is	Strand 2 -	Conce	ept 1 – Perf	formance Obj	ective 3	
			0				•	5		
		The math	club sold	candy ba	rs as a fundra	aiser. The	e number of (andy bars sold b	oy each	
		member	is shown b	elow.						
							49471 58262			
					09 00 00	05 /:	0 82 82			
		Which fr	equency ch	art accur	ately represe	nts the c	lata?			
			. ,		, ,					
			f Candy rs Sold	Frequency	,		# of Candy Bars Sold	Frequency		
			0-49	1			40-49	0		
			0-59	1	\neg		50-59	1		
			0-69	3			60-69	5		
		7	0-79	3			70-79	4		
		8	0-89	5			80-89	3		
		ş	0—99	0			90—99	1		
		10	0—109	1			100-109	1		
			A					c		
								-		
			f Candy rs Sold	Frequency	/		# of Candy Bars Sold	Frequency		
		4	0-49	2	_		4049	1		
		5	60-59	0			50-59	0		
			0-69	5			60-69	5		
			0-79	3	_		70-79	3		
			80-89	2	_		80-89	3		
			0-99	1			90-99	1		
		10	0–109	1		l	100-109	1		
			В					D		
		1	1							_
	Item	3267460	Correc		P-Value	.59	Equate	ed Rasch Valu	ue 0.5332	
19	Number		Answe							_
	2003 Mather	natics Stand	ard Align	ment is	Strand 3 –	Conce	ept 3 – Perf	formance Obj	ective 1	
		If $x = 4$ a	nd $y = -$	1, what	is the value	e of the	expression	below?		
						24	- 8y			
						√∠X	- oy			
		A 0								
		B √5								
		C √14								
		-								
		D 4								

· · · · · ·			7 111/16	J 1010		tereasea r		· · · · · · · · · · · · · · · · · · ·			
	Item	3140790	Correct	А	P-Value	.53	Equated Rasch Value	1.1114			
20	Number		Answer								
	2003 Mathem	natics Standa	ard Alignm	ent is	Strand 2 –	Concept	2 – Performance Object	ive 6			
		Which of t	he following	g is ar	n example of	independe	ent events?				
	 A flipping a fair coin and rolling a six-sided number cube B selecting the order in which one picture will be taken of each of four friends by drawing their names out of a hat C selecting the order in which each member of a history class will present a speech to the rest of the class 										
		D selectin				of candy, on	e piece at a time, from a bag o	containing			
21	Item Number	2019600	Correct Answer	С	P-Value	.52	Equated Rasch Value	0.9039			
41		natics Standa		ent is	Strand 3 –	Concept	3 – Performance Object	ive 10			
		A $y = -4$ B $y = -4$ C $y = -4$ D $y = -4$	$\frac{2}{3}x - 3$ $\frac{3}{2}x - 3$								
	Item	3140793	Correct	D	P-Value	.5789	Equated Rasch Value	0.4578			
22	Number		Answer								
	2003 Mathem	natics Standa	ard Alignm	ent is	Strand $2-$	Concept	3 – Performance Object	ive 1			
	The class wants to order pizza for a study session. There are 3 different vegetable toppings, 3 different meat toppings, and 2 types of crust available. How many different pizzas are possible with 1 vegetable topping, 1 meat topping, and 1 type of crust?										
		A 6									
		B 8									
		C 12									
		D 18									

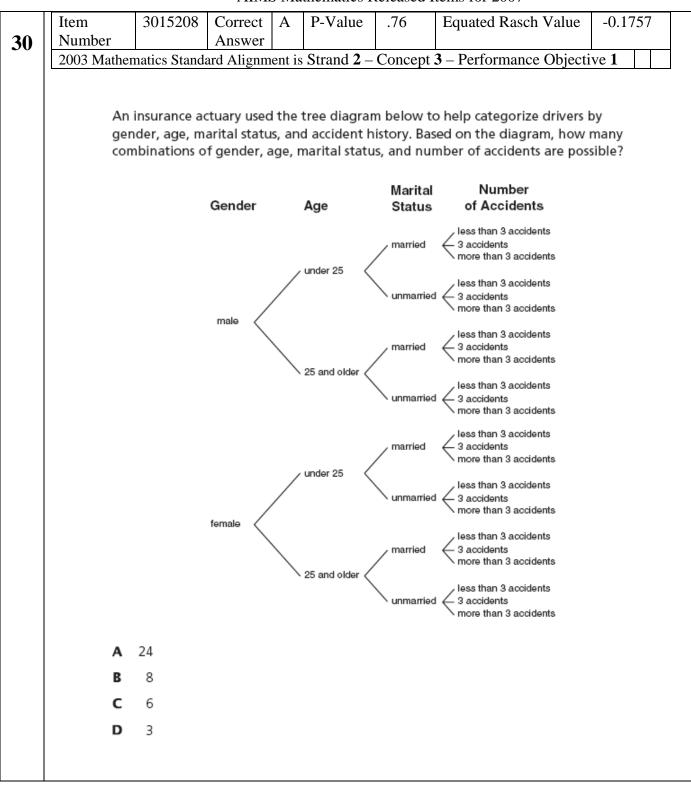


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		1		r		T		Т				
	Item	3140752	Correct	C	P-Value	.8149	Equated Rasch Value	-1.0988				
25	Number		Answer									
	2003 Mather	natics Standa	ard Alignm	ent is	Strand 3 –	Concept	3 – Performance Object	ive 5				
	Maria took a taxicab from her home to the theater downtown. The taxicab company charges a flat fee of \$5.00 plus \$0.25 per mile. Which equation											
	represents C, the total cost of her ride,											
	in terms of <i>m</i> , the length of the trip in miles?											
		A $C = 0$.	25m									
		B C = 5.	25m									
		C C = 5	+ 0.25m									
		D C = 5/	m + 0.25									
	Item	3140753	Correct	А	P-Value	.71	Equated Rasch Value	-0.0215				
26	Number		Answer				•					
	2003 Mather	natics Standa	ard Alignm	ent is	Strand 3 –	Concept	3 – Performance Object	ive 8				
	What is the solution to the											
		equation	below?									
			3(x - 4) =	= 5v -	6							
			J(x - 4) =	- 37	0							
		A x = -	2									
		$\mathbf{A} \mathbf{x} = -$	-3									
		B $x = \frac{3}{4}$	<u>}</u>									
		4	ł									
		C x = 1										
		D $x = 9$										
	Item	3140797	Correct	С	P-Value	.7526	Equated Rasch Value	-0.5855				
27	Number	5110777	Answer	Ũ	i varao		Equated Rusen value	0.0000				
21		natics Standa		ent is	Strand 3 –	Concept	1 – Performance Object	ive 2				
	2002 11141101	nutres stand	a a i ingini		Strande	concept						
		The seque	ence below i	s defir	ned by							
		starting v	vith 1, then a	adding	2 to the							
	immediately preceding term. What is the 10th term of the sequence if the pattern continues?											
		patterno	ontinues:									
			1, 3, 5, 7,	9,								
		A 9										
		B 11										
		C 19 D 21										

	Item	3267472	Correct	А	P-Value	.55	Equated Rasch Value	0.8311				
28	Number	nation Stand	Answer	ontic	Strand 3	Concept	2 Parformanco Obiacti	vo 11				
	2003 Mathematics Standard Alignment is Strand 3 – Concept 3 – Performance Objective 11											
	What is the solution to the equation											
	below?											
	$\frac{x}{4} = \frac{x+1}{3}$											
	$\mathbf{A} x = -4$											
		B x =	1									
		D X -	-1									
		C <i>x</i> =										
		D x =	$\frac{4}{7}$									
	Item	3140838	Correct	С	P-Value	.6001	Equated Rasch Value	0.3516				
29	Number 2003 Mathen	natics Stand	Answer ard Alignm	ent is	Strand 1 –	Concept	1 – Performance Objecti	ive 2				
	2003 Mathem	liuties Stand	ard / mgmm			concept						
			property o ted below		al numbers	is						
		mustra	ted below	ſ								
			x(y + z	<u>z</u>) = 2	xy + xz							
		A Ass	sociative Pre	opert	ty of Additic	n						
		B Ass	sociative Pro	opert	ty of Multipl	ication						
		C Dis	tributive Pr	oper	ty							
		D Commutative Property of										
		MU	Iltiplication									

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