Getting Ready for the 2015 Florida Standards Assessment (FSA)



Grade 6 Mathematics Answer Key

Educators Resource — Spring 2015 FSA Mathematics

2014-15 Florida Standards Assessments ELA and Mathematics Fact Sheet

Equation Editor Item Tutorial [PDF]

FSA Scientific Calculator

Florida Computer-Based Testing Work Folder [PDF]

Spring 2015 Testing Times [PDF]

Grade 6 Mathematics Test Item Specifications [PDF] Grade 7 Mathematics Test Item Specifications [PDF] Grade 8 Mathematics Test Item Specifications [PDF]

Mathematics Test Design Summary – Updated 11-12-14[PDF]

Florida Department of Education http://www.flstandards.org/home.aspx

	MAFS.6.RP.1.1
1.	For every 4 + mystery books checked out, 3 + nonfiction books were checked out. **This question is a possible sample of an Edit-Text Choice technology-enhanced question.**
2	Part A: $\frac{30}{19}$ Part: B: 32:93 Part C: 23 to 38 **This question is a possible sample of a Drag and Drop Hot Text technology- enhanced question.**
3	The student explains the meaning of 2:1 using ratio language such as "for every two red parts, there is one blue part". **This question is a possible sample of an Open Response technology-enhanced question.**
4	B,E **This question is a possible sample of a Multi-Select technology-enhanced question.**
5	

	MAFS.6.RP.1.1 - Practice
1.	The student recognizes the significance of 22 in the problem. The student interprets the ratio 7/22 to mean seven students who prefer to do homework before school out of the whole class of 22 students. **This question is a possible sample of an Open Response technology-enhanced question.**
2	С
3	 ✓ shoes to hats all items to t-shirts ✓ sunglasses to dresses ⇒ shorts to shoes ✓ t-shirts to sunglasses **This question is a possible sample of a Multi-Select technology-enhanced question.**
4	D
5	Α

	MAFS.6.RP.1.2
1	D
2	\$4.50
3	15 minutes per mile **This question is a possible sample of an Open Item technology-enhanced question.**
4	5 plants per square foot

	MAFS.6.RP.1.2 – Practice
	63 miles per hour
1	
I	**This question is a possible sample of an Open Item technology-enhanced question.**
2	D
3	В
4	Restaurant D offered the best deal at \$1.45 per shrimp.
	This question is a possible sample of a Table Item technology-enhanced question.



	MAFS.6.RP.1.3a, b, c, d, e – Practice
	Part A: 5.25
4	Part B: 8
I	
	Sub-standard: b
	False
	True
	True
	False
2	Sub-standard: a
	This question is a possible sample of a Multi-Select technology –enhanced item.
	Yes
	Yes
	No
3	Sub-standard: a
	**This supption is a nassible semple of a Multi Calast technology, enhanced
	item **
	\$55.25
	Sub-standard: c
4	
	**This question is a possible sample of an Equation Editor technology –
	enhanced item.**
	The student will:
	Part A: Convert eight $\frac{1}{4}$ mile laps to 2 miles and converts 2 miles to 10,560
	feet.
	Part B: determine that Roger will need to complete 8 more miles, which is
5	week.
	Sub-standard: d
	This question is a possible sample of an Open Item technology-enhanced guestion.

	MAFS.6.NS.1.1
1	A
2	⁵ / ₂ or equivalent **This question is a possible sample of an Equation Editor technology- enhanced question.**
3	14 plastic bags
4	 ²⁴/₂₅ or equivalent **This question is a possible sample of an Equation Editor Choice technology- enhanced question.**

	MAFS.6.NS.1.1 – Practice
1	$11\frac{1}{3}$ or equivalent
2	$2\frac{4}{5}$ or equivalent
3	13
4	$1\frac{13}{14}$ or equivalent
All que	estions in this section are possible samples of an Equation Editor technology- enhanced question.

	MAFS.6.NS.2.2
1	
	432
2	23
3	582
	All questions in this section are possible samples of an Equation Editor technology- enhanced question.

	MAFS.6.NS.2.2 – Practice
1	41
2	170
3	508
	**All questions in this section are possible samples of an Equation Editor technology-
	enhanced question.**

	MAFS.6.NS.2.3
1	1.04
2	80.337
3	77.505
4	5.839
**All questions in this section are possible samples of an Equation Editor Choice	
technology-enhanced question.**	

	MAFS.6.NS.2.3 - Practice
1	0.053
2	4.9794
3	1.787
4	5.2
All questions in this section are possible samples of an Equation Editor Choice technology-enhanced question.	

	MAFS.6.NS.2.4
1	16
2	56
3	9
4	30
5	В
**Que	stions 1 – 4 in this section are possible samples of an Open Item technology-enhanced
question.**	

	MAFS.6.NS.2.4 – Practice
1	6
2	24
3	4
4	35
5	D
**Questions 1 – 4 in this section are possible samples of an Open Item technology-enhanced	
question.**	

	MAFS.6.	NS.3.5		
		Scenario	Positive/Negative	
		a withdrawal of fifty dollars	 15	
1		a temperature three degrees below zero	-3	
		an elevation seventy feet above sea level	75	
	This	question is a possible sample of a Table I	tem technology –enhan	ced item.
	-12			
2	**This question is a possible sample of an Open Item technology –enhanced item.**			
3	D			
4	С			

	MAFS.6.NS.3.5 – Practice	
1	В	
2	5	
3	-15	
4	 When interpreting the meaning of zero, a sample of what the student says: The ball ends up back at the same place it started after the same amount of gain and loss on the play. The player ran the ball forward but then got pushed back to the starting place. The ball was thrown but incomplete, so they gained zero yards on the play. The ball didn't move. There was no gain and no loss of yards. 	
**Questions 2 – 4 in this section are possible samples of an Open Item technology-enhanced		
question.**		

	MAFS.6.NS.3.6a, b, c
1	C Sub-standard: a
2	-4 Sub-standard: c
3	Each mark on the number line represents one unit. Plot a point on the number line that represents the opposite of -5 units. Select a place on the number line to plot the point. $\begin{array}{r} & & & \\ \hline \end{array}$ Sub-Standard: a This question is a possible sample of a Graphic Response Item Display (GRID) technology –enhanced item.**
4	(3, -2) Sub-standard: b ** This question is a possible sample of an Equation Editor technology-enhanced question.**
5	I I I I I I I I I I I I I I I I I I I





	MAFS.6.NS.3.7a, b, c, d
-	Part A
	Seawolf Nautilus
	-40 -100
	Part B
1	-40 > -100
	or
	-100 < -40
	Sub-standard: b
	**The question in this section is a possible sample of an Equation Editor technology-
	enhanced question.**
	I he student:
	Part A
	Represents the first scenario with the inequality $0 > -54$ or $-54 < 0$.
	Port R
2	Represents the second scenario with the inequality $20 > -60$ or $-60 < 20$.
	Sub-standard: a
	**The question in this section is a possible sample of an Equation Editor technology-
	enhanced question.**
3	D
	Sub-standard: c
	-13°F
	-21°F
4	**The guestion in this section is a neasible semple of an Multi Calest technology
	enhanced question.**
	Sub-standard: d

	□ San Bernadane
	☑ Atlantia
	🗆 Tysonia
5	☑ Maurian
	🗆 Los Hanicca
	The question in this section is a possible sample of an Multi-Select technology- enhanced question.

	MAFS.6.NS.3.7a, b, c, d – Practice
	$-8.5^{\circ}C > -15^{\circ}C$
1	Sub-standard: b
	x < 3
2	Sub-standard: a
	\$215.00
3	The student has to understand that -\$215 = \$215
	Sub-standard: c
4	Less than (<)
4	Sub-standard: d
5	-120 -40 15 170
	Sub-standard: b
**Questions 1 – 4 in this section are possible samples of an Equation Editor technology-	
**Question 5 in this section is possible a sample of Drag and Drop Hot Text technology-	
	enhanced question. ^{**}

	MAFS.6.NS.3.8
1	9 **This question is a possible sample of a Graphic Response Item Display (GRID) and an Open Item technology –enhanced item.**
2	7 units **The question in this section is a possible sample of an Equation Editor technology-enhanced question.**
3	The student graphs the two given points correctly and finds the coordinates of two additional vertices, at either (1, -1) and (1, -5) or at (-7, -1) and (-7, -5), to form a square. The student then finds the coordinates of a second pair of vertices to form a square.
	technology –enhanced item.**

	MAFS.6.NS.3.8 – Practice
1	F
2	В
3	4 units **The question in this section is a possible sample of an Equation Editor technology-enhanced question.**

	MAFS.6.EE.1.1
1	7 ⁶
2	16
3	5 ⁵
All questions in this section are possible samples of an Equation Editor technology- enhanced question.	

	MAFS.6.EE.1.1 - Practice
1	3 ⁷
2	64
3	$\frac{8}{125}$
<mark>**/</mark>	All questions in this section are possible samples of an Equation Editor technology- enhanced question.**

	MAFS.6.EE.1.2a, b, c
1	 x + 6 **The question in this section is a possible sample of an Equation Editor technology- enhanced question.** Sub-standard: a
	$2p \longleftrightarrow product$
	$\frac{3p^2}{5}$ \longleftrightarrow quotient
2	$24 - 2p \longleftrightarrow difference$
	$3 \longleftrightarrow \frac{\text{coefficient}}{3}$
	The question in this section is a possible sample of an Drag and Drop Hot Text technology-enhanced question. Sub-standard: b
	B, C
3	**The question in this section is a possible sample of an Multi-Select technology- enhanced question.** Sub-standard: a
	Its volume is 8 inches cubed and its surface area is 24 inches squared.
4	**The question in this section is a possible sample of an Equation Editor technology- enhanced question.**
	Sub-standard: c

	MAFS.6.EE.1.2a, b, c - Practice				
	✓ 15 + 3 × n				
	\Box 3 × 15n				
	✓ 15 + 3 <i>n</i>				
1	\Box 15 × <i>n</i> + 3				
	\checkmark $(n \times 3) + 15$				
	\Box (<i>n</i> + 15) × 3				
	**The question in this section is a possible sample of an Multi-Select technology-				
	enhanced question.**				
2	A Sub-standard: a				
	✓ Samantha has a job babysitting. She earns \$8 for every hour that she works. This week she earned \$143, which included a \$15 tip.				
	Mr. Wilks mows lawns for extra money. Each lawn that he mows, he earns \$15. After collecting the money for the lawns he mowed this week, he added the amount to the \$8 in his wallet, totaling \$143.				
3	Roger works in the meat section of a grocery store. So far this morning, he has cut 8 salmon steaks. In the meat display, there are several rows of 15 salmons steaks. When Roger puts the cut salmon steaks in the meat display, there will be 143 salmon steaks.				
	Ms. Williams was looking for pencils. She found a box with 15 pencils in ↓ the drawer. Then, she found some unopened packages with 8 pencils in each package. After counting all of the pencils, she had 143 pencils.				
	The question in this section is a possible sample of an Multi-Select technology- enhanced question.				
4	D				

	MAFS.6.EE.1.3
1	4 <i>w</i> + 10
2	6 <i>n</i> + 18
3	4 <i>b</i> + 8
	**All questions in this section are possible samples of an Equation Editor Choice
	technology-enhanced question.**

	MAFS.6.EE.1.3 – Practice
1	2 <i>t</i> + 18
2	41x
3	4z
	**All questions in this section are possible samples of an Equation Editor Choice
	technology-enhanced question.**





	MAFS.6.EE.2.	5				
1	В					
		Equations	Yes	No		
		5a - 1 = 14 true for $a = 3$				
2		$100 - b^2 = 80$ true for $b = 10$				
		32 = 16f true for $f = 2$				
	This question is a possible sample of a Multi-Select technology –enhanced item.					
3	С					

	MAFS.6.EE.2.5 – Practice
1	$\Box x = 1$
	\checkmark $x = 2$
	$\Box x = 3$
	$\Box x = 4$
	$\checkmark x = 5$
	$\Box x = 6$
	**This question is a possible sample of a Multi-Select technology –enhanced
	item.**
2	D
3	Α

	MAFS.6.EE.2.6
1	D
2	36.75–3 <i>x</i> **This question is a possible sample of an Equation Editor technology –enhanced item.**
3	$\frac{1}{4}d$ **This question is a possible sample of an Equation Editor technology –enhanced item.**
4	D

	MAFS.6.EE.2.6 – Practice			
1	В			
	The student states that <i>x</i> represents the value of <i>each</i> coin. The student states			
2	that the possible values of x are 1, 5, 10, 25, 50, and 100. The student states if			
	10x = 50 then $x = 5$.			
3	2n			
	N = Nadine Points			
	M = Mark Points			
4				
	N = M + 5			
<mark>**Que</mark>	estions 2 – 4 are all possible samples of an Open Response technology –enhanced			
item.**				

	MAFS.6.EE.2.7			
1	Part A: t × * 8 = 39.60 * Part B: 4.95 **This question is a possible sample of an Editing Task Choice technology – enhanced item.**			
2	18			
3	$2\frac{1}{2} + h = 5$ $h = 2\frac{1}{2}$			
4	<i>x</i> = 2			
**All questions in this section are possible samples of an Equation Editor technology-				
enhanced question.**				

	MAFS.6.EE.2.7 – Practice			
1	$\frac{25}{2}$ or $12\frac{1}{2}$			
2	6x = 1110			
2	<i>x</i> = 185			
3	$\frac{3}{5}s = 24$			
	<i>s</i> = 40			
4	<i>r</i> = 32			
**All questions in this section are possible samples of an Equation Editor technology-				
enhanced question.**				

	MAFS.6.EE.2.8
1	h > 6000 or 6000 < h **This question is a possible sample of an Equation Editor technology –enhanced item.**
2	t < -2 or $-2 > t**This question is a possible sample of an Equation Editor technology –enhanceditem.**$
3	$w \ge 12$ or $12 \le w$ **This question is a possible sample of an Equation Editor technology –enhanced item.**
4	This question is a possible sample of a Graphic Response Item Display (GRID) technology –enhanced item.**



	MAFS.6.EE.3.9
1	C
	Part A: 1.25
2	
	Part B: <i>y</i> =5.5 <i>x</i>
	Part A:
	q = 1500 - n
3	Part B:
	The independent variable as the quantity of coffee beans removed is <i>n</i> and the
	dependent variable as the quantity of coffee beans remaining in the storage bin
	is q.
4	d = 10h

	MAFS.6.EE.3.9 – Practice				
1	С				
	Part A				
	<i>c</i> = 200 –	2 <i>t</i>			
2	Part B				
The independent variable as the number of times the crank is turned is t					
	the dependent variable as the amount of coffee remaining is <i>c</i> .				
		Number of Bouquets, b	<u>Number of Flowers, f</u>		
		4	32		
		8	64		
3		12	96		
Ms. Roberts used 224 flowers today to make 28 bouquets.					
	**This question is a possible sample of Table Item technologyenhanced iten				

	MAFS.6.G.1.1
1.	Part A: 24 Part B: $\frac{1}{4}$
2.	The student finds an area of 105 cm ² for the trapezoid showing work clearly to support those answer.
3.	104 in ²
ł	**All questions in this section are possible samples of an Equation Editor technology- enhanced question.**

	MAFS.6.G.1.1 – Practice
1.	The student finds an area of 168 yd ² for the parallelogram showing work clearly to support the answer.
2.	319 ft ²
3.	24.5 in ²
All questions in this section are possible samples of an Equation Editor technology- enhanced question.	

	MAFS.6.G.1.2
1	4680 in ³
2	$\frac{3}{8}$ in ³ or equivalent
3	$\frac{45}{8}$ cm ³
<mark>**Al</mark>	I questions in this section are possible samples of an Equation Editor technology- enhanced question.**

	MAFS.6.G.1.2 – Practice
1	$\frac{1}{10} \text{ cm}^3$
2	$\frac{1}{2}$ ft ³
3	450 m ³
<mark>**Al</mark>	Il questions in this section are possible samples of an Equation Editor technology- enhanced question.**



	MAFS.6.G.1.3 – Practice
1 & 2	The student plots the points and graphs the rectangle correctly and determines the
	length of the base (9 $\frac{1}{2}$ units) and height (3 units), and uses the dimensions to
	determine the area of the rectangle as $28\frac{1}{2}$ square units.
3	A

1 Part A: D Part B: 1300	
Part B: 1300	
2 Square Pyramid	
3 1,734 sq mm	

	MAFS.6.G.1.4 – Practice
1	23,152 sq in
2	Part A: Square Pyramid
	Part B: 16 square units
3	14 sq in

	MAFS.6.SP.1.1
1	C
2	 How many days are in March? How old is your dog? How old are the dogs on this street? What percent of people like watermelons? Do you like watermelons? How many bricks are in this wall? What was the highest temperature today in town? **This question is a possible sample of a Multi-Select technology –enhanced item.**
3	 How many houses are in each neighborhood? What is the size of the largest yard in all the neighborhoods? How many students are enrolled in the smallest school? How many schools are in each neighborhood? How many houses have fences around the backyards? **This question is a possible sample of a Multi-Select technology –enhanced item.**

	MAFS.6.SP.1.1 – Practice
1	D
2	 How far are we from the restaurant? How long will it be until we get there? Would you rather have burgers or pizza? How much should we leave for the tip? What was the most frequently ordered dish in the restaurant this evening? Did you like the pizza tonight? Which table's bill was the highest? How many people were sitting at each table this evening? **This question is a possible sample of a Multi-Select technology –enhanced item.**
3	В

	MAFS.6.SP.1.2
1	A
2	В
3	D

	MAFS.6.SP.1.2 – Practice
1	В
2	В
3	C

	MAFS.6.SP.1.3
1	В
2	D
3	С
4	D

	MAFS.6.SP.1.3 – Practice
1	A
2	C
3	C
4	A



	MAFS.6.SP.2.4 – Practice				
1	C				
	The student correctly scales the axis using reasonable limits, finds and graphs the five-number summary (minimum = 11, $Q_1 = 15.5$, median = 23, $Q_3 = 29$, and maximum = 34), draws the box and whiskers, and includes an axis label and title.				
	Shark Attacks in Florida (2001-2013)				
2	••				
	10 12 14 16 18 20 22 24 26 28 30 32 34 Number of Attacks				
	This question is a possible sample of a Graphic Response Item Display (GRID) technology –enhanced item.				
3	В				

	MAFS.6.SP.2	.5a, b, c, d				
	Part A: 5					
	Part B:					
1	The mean of the lengths of the insects measured by the science class is					
	5/8	¢, which is	greater	than the mean length		
	of adults of that type.					
	Sub-Standard	l:a&b				
	А					
2						
	Sub-Standard	l: b				
	В					
3						
	Sub-standard	: C				

	MAFS.6.SP.2.5a, b, c, d – Practice
	A
1	
	Sub-Standard: b
	С
2	
	Sub-standard: c
	A
3	
	Sub-Standard: d