

# Mathematics FSA EOC

## Update

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Florida  
Standards Assessments



# FSA UPDATES

Please remember that students may not have access to ANY electronic device, including, but not limited to, cell phones and smartphones, during testing OR during breaks. They may not, therefore, use any personal electronic device to access a calculator. Use of an electronic device, other than an APPROVED handheld calculator, will result in test invalidation.



# FSA UPDATES

**Question:** How long will the students have on the exam?

**Answer:**

Course	Number of Items	Number of Sessions	Test Materials	Proposed Time
Algebra 1	64-68	2	CBT with work folder; Scientific Calculator (Session 2 only)	180 minutes
Geometry	64-68	2	CBT with work folder; Scientific Calculator (Session 2 only)	180 minutes
Algebra 2	64-68	2	CBT with work folder; Scientific Calculator (Session 2 only)	180 minutes

# FSA UPDATES

## Algebra 1 EOC Standards Coverage

Reporting Category	Standard	% of Test
Algebra and Modeling	MAFS.912.A-APR.1.1	41%
	MAFS.912.A-CED.1.1 Also Assesses MAFS.912.A-REI.2.3 and MAFS.912.A-CED.1.4	
	MAFS.912.A-CED.1.2 Also Assesses MAFS.912.A-REI.3.5, MAFS.912.A-REI.3.6, and MAFS.912.A-REI.4.12	
	MAFS.912.A-CED.1.3	
	MAFS.912.A-REI.1.1	
	MAFS.912.A-REI.2.4	
	MAFS.912.A-REI.4.11 Also Assesses MAFS.912.A-REI.4.10	
	MAFS.912.A-SSE.2.3 Also Assesses MAFS.912.A-SSE.1.1 and MAFS.912.A-SSE.1.2	
	MAFS.912.F-BF.2.3	
	MAFS.912.F-IF.1.2 Also Assesses MAFS.912.F-IF.1.1 and MAFS.912.F-IF.2.5	
Functions and Modeling	MAFS.912.F-IF.2.4 Also Assesses MAFS.912.F-IF.3.9	40%
	MAFS.912.F-IF.2.6 Also Assesses MAFS.912.S-ID.3.7	
	MAFS.912.F-IF.3.8 Also Assesses MAFS.912.A-APR.2.3 and MAFS.912.F-IF.3.7	
	MAFS.912.F-LE.1.1 Also Assesses MAFS.912.F-LE.2.5	
	MAFS.912.F-LE.1.2 Also Assesses MAFS.912.F-BF.1.1 and MAFS.912.F-IF.1.3	
	MAFS.912.F-LE.1.3	
	MAFS.912.N-RN.1.2 Also Assesses MAFS.912.N-RN.2.3 and MAFS.912.N-RN.1.1	
	MAFS.912.S-ID.1.1	
	MAFS.912.S-ID.1.2 Also Assesses MAFS.912.S-ID.1.3	
	MAFS.912.S-ID.2.5	
Statistics and the Number System	MAFS.912.S-ID.2.6 Also Assesses MAFS.912.S-ID.3.8 and MAFS.912.S-ID.3.9	19%
	Total Standard Groupings	100%
	21	

Number and Quantity: MAFS.912.N-Q.1.1, MAFS.912.N-Q.1.2 and MAFS.912.N-Q.1.3 are assessed throughout.

# FSA UPDATES

## Geometry EOC Standards Coverage

Reporting Category	Standard	% of Test
Congruence, Similarity, Right Triangles, and Trigonometry	MAFS.912.G-CO.1.1	46%
	MAFS.912.G-CO.1.2 Also Assesses MAFS.912.G-CO.1.4	
	MAFS.912.G-CO.1.5 Also Assesses MAFS.912.G-CO.1.3	
	MAFS.912.G-CO.2.6 Also Assesses MAFS.912.G-CO.2.7 and MAFS.912.G-CO.2.8	
	MAFS.912.G-CO.3.9	
	MAFS.912.G-CO.3.10	
	MAFS.912.G-CO.3.11	
	MAFS.912.G-CO.4.12 Also Assesses MAFS.912.G-CO.4.13	
	MAFS.912.G-SRT.1.1	
	MAFS.912.G-SRT.1.2	
	MAFS.912.G-SRT.1.3 Also Assesses MAFS.912.G-SRT.2.4	
	MAFS.912.G-SRT.2.5	
	MAFS.912.G-SRT.3.8 Also Assesses MAFS.912.G-SRT.3.6 and MAFS.912.G-SRT.3.7	
	MAFS.912.G-C.1.1	
	MAFS.912.G-C.1.2	
	MAFS.912.G-C.1.3	
	MAFS.912.G-C.2.5	
Circles, Geometric Measurement, and Geometric Properties with Equations	MAFS.912.G-GMD.1.1	38%
	MAFS.912.G-GMD.1.3	
	MAFS.912.G-GMD.2.4	
	MAFS.912.G-GPE.1.1	
	MAFS.912.G-GPE.2.4	
	MAFS.912.G-GPE.2.5	
	MAFS.912.G-GPE.2.6	
	MAFS.912.G-GPE.2.7	
	MAFS.912.G-MG.1.1	
	MAFS.912.G-MG.1.2	
Modeling with Geometry	MAFS.912.G-MG.1.3	16%
	Total Standard Groupings	
	28	
		100%

# FSA UPDATES

## Algebra 2 EOC Standards Coverage

Reporting Category	Standard	% of Test
Algebra and Modeling	MAFS.912.A-APR.1.1 Also Assesses MAFS.912.A-APR.3.4	36%
	MAFS.912.A-APR.4.6 Also Assesses MAFS.912.A-APR.2.2	
	MAFS.912.A-CED.1.1 Also Assesses MAFS.912.A-REI.1.2 and MAFS.912.A-CED.1.4	
	MAFS.912.A-CED.1.2 Also Assesses MAFS.912.A-CED.1.3, MAFS.912.A-REI.3.6, and MAFS.912.A-REI.3.7	
	MAFS.912.A-REI.1.1	
	MAFS.912.A-REI.4.11	
	MAFS.912.A-SSE.2.3 Also Assesses MAFS.912.A-SSE.1.1 and MAFS.912.A-SSE.1.2	
	MAFS.912.N-CN.3.7 Also Assesses MAFS.912.A-REI.2.4	
	MAFS.912.G-GPE.1.2	
	MAFS.912.F-BF.1.2 Also Assesses MAFS.912.F-BF.1.1, and MAFS.912.A-SSE.2.4	
	MAFS.912.F-BF.2.3	
	MAFS.912.F-BF.2.4	
Functions and Modeling	MAFS.912.F-IF.2.4 Also Assesses MAFS.912.F-IF.3.9, MAFS.912.F-IF.2.5, and MAFS.912.F-LE.2.5	36%
	MAFS.912.F-IF.3.8 Also Assesses MAFS.912.A-APR.2.3, MAFS.912.F-IF.2.6, and MAFS.912.F-IF.3.7	
	MAFS.912.F-LE.1.4 Also Assesses MAFS.912.F-BF.2.a	
	MAFS.912.F-TF.1.2 Also Assesses MAFS.912.F-TF.1.1 and MAFS.912.F-TF.3.8	
	MAFS.912.F-TF.2.5	
	MAFS.912.N-CN.1.2 Also Assesses MAFS.912.N-CN.1.1	
	MAFS.912.N-RN.1.2 Also Assesses MAFS.912.N-RN.1.1	
	MAFS.912.S-CP.1.1	
Statistics, Probability, and the Number System	MAFS.912.S-CP.1.5 Also Assesses MAFS.912.S-CP.1.4, MAFS.912.S-CP.1.2, MAFS.912.S-CP.1.3, and MAFS.912.S-CP.2.6	28%
	MAFS.912.S-CP.2.7	
	MAFS.912.S-IC.1.1	
	MAFS.912.S-IC.2.3 Also Assesses MAFS.912.S-IC.2.4, MAFS.912.S-IC.2.5, MAFS.912.S-IC.1.2, and MAFS.912.S-IC.2.6	
	MAFS.912.S-ID.1.4	
Total Standard Groupings	25	100%

Number and Quantity: MAFS.912.N-Q.1.2 is assessed throughout.

# FSA UPDATES

**Question:** Will the students have a formula sheet?

**Answer:** Yes.

- The following slides give the formulas allowed on the CBT (Computer-Based Test) for Algebra 1, Geometry and Algebra 2.

# Algebra 1 EOC FSA Reference Sheet

## Algebra 1 EOC FSA Mathematics Reference Sheet

### Customary Conversions

1 foot = 12 inches

1 yard = 3 feet

1 mile = 5,280 feet

1 mile = 1,760 yards

1 cup = 8 fluid ounces

1 pint = 2 cups

1 quart = 2 pints

1 gallon = 4 quarts

1 pound = 16 ounces

1 ton = 2,000 pounds

### Metric Conversions

1 meter = 100 centimeters

1 meter = 1000 millimeters

1 kilometer = 1000 meters

1 liter = 1000 milliliters

1 gram = 1000 milligrams

1 kilogram = 1000 grams

### Time Conversions

1 minute = 60 seconds

1 hour = 60 minutes

1 day = 24 hours

1 year = 365 days

1 year = 52 weeks

# Geometry EOC FSA Reference Sheet

## Customary Conversions

1 foot = 12 inches

1 yard = 3 feet

1 mile = 5,280 feet

1 mile = 1,760 yards

1 cup = 8 fluid ounces

1 pint = 2 cups

1 quart = 2 pints

1 gallon = 4 quarts

1 pound = 16 ounces

1 ton = 2,000 pounds

## Metric Conversions

1 meter = 100 centimeters

1 meter = 1000 millimeters

1 kilometer = 1000 meters

1 liter = 1000 milliliters

1 gram = 1000 milligrams

1 kilogram = 1000 grams

## Time Conversions

1 minute = 60 seconds

1 hour = 60 minutes

1 day = 24 hours

1 year = 365 days

1 year = 52 weeks

## Formulas

$$\sin A^\circ = \frac{\text{opposite}}{\text{hypotenuse}}$$

$$\cos A^\circ = \frac{\text{adjacent}}{\text{hypotenuse}}$$

$$\tan A^\circ = \frac{\text{opposite}}{\text{adjacent}}$$

$$V = Bh$$

$$V = \frac{1}{3}Bh$$

$$V = \frac{4}{3}\pi r^3$$

$$y = mx + b, \text{ where } m = \text{slope and } b = y\text{-intercept}$$

$$y - y_1 = m(x - x_1), \text{ where } m = \text{slope and } (x_1, y_1) \text{ is a point on the line}$$

# Algebra 2 EOC FSA Reference Sheet

## Formulas

### Customary Conversions

1 foot = 12 inches

1 yard = 3 feet

1 mile = 5,280 feet

1 mile = 1,760 yards

1 cup = 8 fluid ounces

1 pint = 2 cups

1 quart = 2 pints

1 gallon = 4 quarts

1 pound = 16 ounces

1 ton = 2,000 pounds

### Metric Conversions

1 meter = 100 centimeters

1 meter = 1000 millimeters

1 kilometer = 1000 meters

1 liter = 1000 milliliters

1 gram = 1000 milligrams

1 kilogram = 1000 grams

### Time Conversions

1 minute = 60 seconds

1 hour = 60 minutes

1 day = 24 hours

1 year = 365 days

1 year = 52 weeks

$$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}, \text{ where } a, b, \text{ and } c \text{ are coefficients in an equation of the form } ax^2 + bx + c = 0$$

$$\log_b a = \frac{\log a}{\log b}$$

$$\sin A^\circ = \frac{\text{opposite}}{\text{hypotenuse}}$$

$$\cos A^\circ = \frac{\text{adjacent}}{\text{hypotenuse}}$$

$$\tan A^\circ = \frac{\text{opposite}}{\text{adjacent}}$$

$$P(B|A) = \frac{P(A \text{ and } B)}{P(A)}$$

$$P(A \text{ or } B) = P(A) + P(B) - P(A \text{ and } B)$$

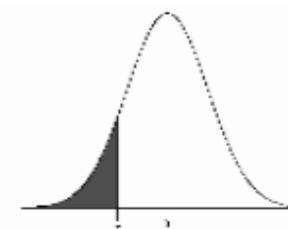
$$z = \frac{(x - \mu)}{\sigma}, \text{ where } \mu = \text{mean and } \sigma = \text{standard deviation}$$

# Algebra 2 Z-scores Tables

Table of Standard Normal Probabilities for Positive z-scores



Table of Standard Normal Probabilities for Negative z-scores



z	0.00	0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09
0.0	0.5000	0.5040	0.5080	0.5120	0.5160	0.5199	0.5239	0.5279	0.5319	0.5359
0.1	0.5398	0.5438	0.5478	0.5517	0.5557	0.5596	0.5636	0.5675	0.5714	0.5753
0.2	0.5793	0.5832	0.5871	0.5910	0.5948	0.5987	0.6026	0.6064	0.6103	0.6141
0.3	0.6179	0.6217	0.6255	0.6293	0.6331	0.6368	0.6406	0.6443	0.6480	0.6517
0.4	0.6554	0.6591	0.6628	0.6664	0.6700	0.6736	0.6772	0.6808	0.6844	0.6879
0.5	0.6915	0.6950	0.6985	0.7019	0.7054	0.7088	0.7123	0.7157	0.7190	0.7224
0.6	0.7257	0.7291	0.7324	0.7357	0.7389	0.7422	0.7454	0.7486	0.7517	0.7549
0.7	0.7580	0.7611	0.7642	0.7673	0.7704	0.7734	0.7764	0.7794	0.7823	0.7852
0.8	0.7881	0.7910	0.7939	0.7967	0.7995	0.8023	0.8051	0.8078	0.8106	0.8133
0.9	0.8159	0.8186	0.8212	0.8238	0.8264	0.8289	0.8315	0.8340	0.8365	0.8389
1.0	0.8413	0.8438	0.8461	0.8485	0.8508	0.8531	0.8554	0.8577	0.8599	0.8621
1.1	0.8643	0.8665	0.8686	0.8708	0.8729	0.8749	0.8770	0.8790	0.8810	0.8830
1.2	0.8849	0.8869	0.8888	0.8907	0.8925	0.8944	0.8962	0.8980	0.8997	0.9015
1.3	0.9032	0.9049	0.9066	0.9082	0.9099	0.9115	0.9131	0.9147	0.9162	0.9177
1.4	0.9192	0.9207	0.9222	0.9236	0.9251	0.9265	0.9279	0.9292	0.9306	0.9319
1.5	0.9332	0.9345	0.9357	0.9370	0.9382	0.9394	0.9406	0.9418	0.9429	0.9441
1.6	0.9452	0.9463	0.9474	0.9484	0.9495	0.9505	0.9515	0.9525	0.9535	0.9545
1.7	0.9554	0.9564	0.9573	0.9582	0.9591	0.9599	0.9608	0.9616	0.9625	0.9633
1.8	0.9641	0.9649	0.9656	0.9664	0.9671	0.9678	0.9686	0.9693	0.9699	0.9706
1.9	0.9713	0.9719	0.9726	0.9732	0.9738	0.9744	0.9750	0.9756	0.9761	0.9767
2.0	0.9772	0.9778	0.9783	0.9788	0.9793	0.9798	0.9803	0.9808	0.9812	0.9817
2.1	0.9821	0.9826	0.9830	0.9834	0.9838	0.9842	0.9846	0.9850	0.9854	0.9857
2.2	0.9861	0.9864	0.9868	0.9871	0.9875	0.9878	0.9881	0.9884	0.9887	0.9890
2.3	0.9893	0.9896	0.9898	0.9901	0.9904	0.9906	0.9909	0.9911	0.9913	0.9916
2.4	0.9918	0.9920	0.9922	0.9925	0.9927	0.9929	0.9931	0.9932	0.9934	0.9936
2.5	0.9938	0.9940	0.9941	0.9943	0.9945	0.9946	0.9948	0.9949	0.9951	0.9952
2.6	0.9953	0.9955	0.9956	0.9957	0.9959	0.9960	0.9961	0.9962	0.9963	0.9964
2.7	0.9965	0.9966	0.9967	0.9968	0.9969	0.9970	0.9971	0.9972	0.9973	0.9974
2.8	0.9974	0.9975	0.9976	0.9977	0.9977	0.9978	0.9979	0.9980	0.9981	
2.9	0.9981	0.9982	0.9982	0.9983	0.9984	0.9984	0.9985	0.9985	0.9986	
3.0	0.9987	0.9987	0.9987	0.9988	0.9988	0.9989	0.9989	0.9990	0.9990	
3.1	0.9990	0.9991	0.9991	0.9992	0.9992	0.9992	0.9993	0.9993		
3.2	0.9993	0.9993	0.9994	0.9994	0.9994	0.9994	0.9995	0.9995		
3.3	0.9995	0.9995	0.9995	0.9996	0.9996	0.9996	0.9996	0.9996		
3.4	0.9997	0.9997	0.9997	0.9997	0.9997	0.9997	0.9997	0.9997		

$$z = \frac{(x - \mu)}{\sigma}, \text{ where } \mu = \text{mean and } \sigma = \text{standard deviation}$$

z	0.00	0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09
-3.4	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0002
-3.3	0.0005	0.0005	0.0005	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0003
-3.2	0.0007	0.0007	0.0006	0.0006	0.0006	0.0006	0.0006	0.0006	0.0005	0.0005
-3.1	0.0010	0.0009	0.0009	0.0009	0.0008	0.0008	0.0008	0.0008	0.0007	0.0007
-3.0	0.0013	0.0013	0.0012	0.0012	0.0011	0.0011	0.0011	0.0011	0.0010	0.0010
-2.9	0.0019	0.0018	0.0018	0.0017	0.0016	0.0016	0.0015	0.0015	0.0014	0.0014
-2.8	0.0026	0.0025	0.0024	0.0023	0.0023	0.0022	0.0021	0.0021	0.0020	0.0019
-2.7	0.0035	0.0034	0.0033	0.0032	0.0031	0.0030	0.0029	0.0028	0.0027	0.0026
-2.6	0.0047	0.0045	0.0044	0.0043	0.0041	0.0040	0.0039	0.0038	0.0037	0.0036
-2.5	0.0062	0.0060	0.0059	0.0057	0.0055	0.0054	0.0052	0.0051	0.0049	0.0048
-2.4	0.0082	0.0080	0.0078	0.0075	0.0073	0.0071	0.0069	0.0068	0.0066	0.0064
-2.3	0.0107	0.0104	0.0102	0.0099	0.0096	0.0094	0.0091	0.0089	0.0087	0.0084
-2.2	0.0139	0.0136	0.0132	0.0129	0.0125	0.0122	0.0119	0.0116	0.0113	0.0110
-2.1	0.0179	0.0174	0.0170	0.0166	0.0162	0.0158	0.0154	0.0150	0.0146	0.0143
-2.0	0.0228	0.0222	0.0217	0.0212	0.0207	0.0202	0.0197	0.0192	0.0188	0.0183
-1.9	0.0287	0.0281	0.0274	0.0268	0.0262	0.0256	0.0250	0.0244	0.0239	0.0233
-1.8	0.0359	0.0351	0.0344	0.0336	0.0329	0.0322	0.0314	0.0307	0.0301	0.0294
-1.7	0.0446	0.0436	0.0427	0.0418	0.0409	0.0401	0.0392	0.0384	0.0375	0.0367
-1.6	0.0548	0.0537	0.0526	0.0516	0.0505	0.0495	0.0485	0.0475	0.0465	0.0455
-1.5	0.0668	0.0655	0.0643	0.0630	0.0618	0.0606	0.0594	0.0582	0.0571	0.0559
-1.4	0.0808	0.0793	0.0778	0.0764	0.0749	0.0735	0.0721	0.0708	0.0694	0.0681
-1.3	0.0968	0.0951	0.0934	0.0918	0.0901	0.0885	0.0869	0.0853	0.0838	0.0823
-1.2	0.1151	0.1131	0.1112	0.1093	0.1075	0.1056	0.1038	0.1020	0.1003	0.0985
-1.1	0.1357	0.1335	0.1314	0.1292	0.1271	0.1251	0.1230	0.1210	0.1190	0.1170
-1.0	0.1587	0.1562	0.1539	0.1515	0.1492	0.1469	0.1446	0.1423	0.1401	0.1379
-0.9	0.1841	0.1814	0.1788	0.1762	0.1736	0.1711	0.1685	0.1660	0.1635	0.1611
-0.8	0.2119	0.2090	0.2061	0.2033	0.2005	0.1977	0.1949	0.1922	0.1894	0.1867
-0.7	0.2420	0.2389	0.2358	0.2327	0.2296	0.2266	0.2236	0.2206	0.2177	0.2148
-0.6	0.2743	0.2709	0.2676	0.2643	0.2611	0.2578	0.2546	0.2514	0.2483	0.2451
-0.5	0.3085	0.3050	0.3015	0.2981	0.2946	0.2912	0.2877	0.2843	0.2810	0.2776
-0.4	0.3446	0.3409	0.3372	0.3336	0.3300	0.3264	0.3228	0.3192	0.3156	0.3121
-0.3	0.3821	0.3783	0.3745	0.3707	0.3669	0.3632	0.3594	0.3557	0.3520	0.3483
-0.2	0.4207	0.4168	0.4129	0.4090	0.4052	0.4013	0.3974	0.3936	0.3897	0.3859
-0.1	0.4602	0.4562	0.4522	0.4483	0.4443	0.4404	0.4364	0.4325	0.4286	0.4247
-0.0	0.5000	0.4960	0.4920	0.4880	0.4840	0.4801	0.4761	0.4721	0.4681	0.4641

# FSA UPDATES

## Scientific Drop Down Calculator

Go to the following website in order to see and practice with the drop-down calculator:

<http://demo.tds.airast.org/TDSCalculator/TDSCalculator.html?mode=ScientificInv>

# FSA UPDATES

**Question:** What does the yes, no, and neutral mean for calculator designations?

**Answer:**

**Yes** - it will be available for items

**No** - it will not be available.

**Neutral** - items will be reviewed by a committee to determine if a calculator is necessary, once a decision is made it will be placed in either the “No Calculator” or “Calculator” section of the EOC.

# FSA UPDATES

**Question:** What are the item types?

**Answer:**

- Multiple Choice
- Multiselect
- Equation Response
- Grid with Action Buttons

- Hot Text(Drag & Drop)
- Open Response
- Matching
- Table Response
- Editing Task
- Editing Task Choice

# MULTIPLE CHOICE

Requires student to select a single answer option. Items consist of a context, a question, a single correct answer, and 3 plausible distractors.

7

OP

Lisa is trying to earn money to buy a bike. She can either open a lemonade stand or sell cookies, but she does not have the time to do both.

What is the opportunity cost for Lisa if she decides to open a lemonade stand?

- A She cannot buy a bike.
- B She cannot sell lemonade.
- C She cannot sell any cookies.
- D She cannot earn any money.

Click on an answer option or row  
to select it as your answer.

# MULTIPLE SELECT

Allow the student to select more than one answer option. Some items may ask the student to select a specific number of responses, while other items may ask the student to select all correct responses. Items consist of a context, a question, two or more correct answers and several plausible distractors.

12



Select the values that are greater than or equal to  $\frac{1}{2}$ .

- 0.6
- $\frac{2}{6}$
- $\frac{5}{8}$
- .5
- .45
- One Fifth
- $\frac{2}{10}$



Click the checkbox next to each option you want to select as a response. You may select more than one option.

# EQUATION RESPONSE

Require the student to enter a valid statement that answers the question. The response may be a number, an expression, or an equation. Items may consist of a context, a question, and a response area.

4

A salesperson earns \$125 a day, plus a commission of 5% of the price of each item she sells. The salesperson sold one item yesterday that was \$750.

Create an equation that can be used to determine the amount of money the salesperson earned yesterday.

$y =$  **Equation response field**

**Navigation buttons**

Special symbols  
(fraction, exponent, square root, etc.)

1	2	3	x	y
4	5	6	+	-
7	8	9	<	$\leq$
0	.	-	$\frac{a}{b}$	$a^b$
$=$ $\geq$ $\geq$ $\pi$				

# EQUATION RESPONSE

## About Special Symbols

To add a special symbol to an equation, select the corresponding button. After entering a number or symbol, use the straight arrow buttons to move the cursor between fields.

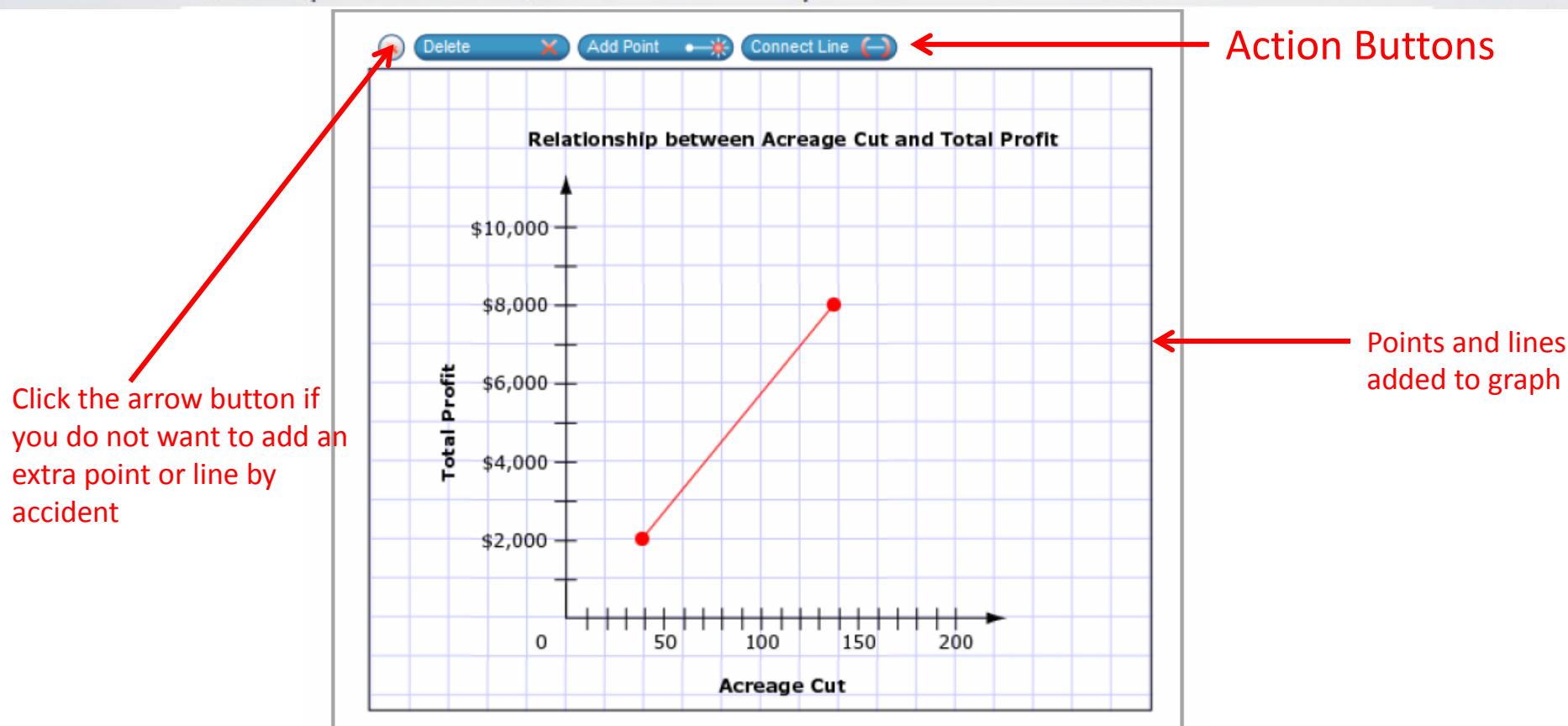
Special Symbol	Description
<b>Fraction</b> 	This symbol allows you to enter a <b>fraction</b> into the equation editor. Select the numerator, then navigate to the denominator, and then select the value for that field.
<b>Exponent</b> 	This symbol allows you to enter an <b>exponent</b> into the equation editor. After you enter the base number, select the exponent button, and then enter the exponent number.
<b>Subscript</b> 	This symbol allows you to enter a <b>subscript</b> into the equation editor. After you enter the base number, select the subscript button, and then enter the subscript number.

# EQUATION RESPONSE

Special Symbol	Description
Parentheses 	This symbol allows you to enter <b>parentheses</b> . Once you select the symbol, the parentheses will appear in the equation editor. Then select the numbers and symbols that should appear between the open and close parentheses.
Absolute Value 	This symbol allows you to enter an <b>absolute value</b> . Once you select the symbol, the lines will appear in the equation editor. Then select the numbers and symbols that should appear between the lines.
Square Root 	This symbol allows you to enter a <b>square root</b> value. Once you select the symbol, the radical sign will appear in the equation editor. Enter the number that should appear under the radical sign.
$n^{\text{th}}$ Root 	This symbol allows you to enter an $n^{\text{th}}$ <b>root</b> value. Once you select the symbol, the radical sign will appear in the equation editor. Enter the number that should appear under the radical sign. Use the straight left arrow to navigate to the $n^{\text{th}}$ field and enter the number that should appear there.

# GRID ITEMS WITH ACTION BUTTONS

Require that the student use the point, line, and/or arrow buttons to create a response on a grid. Items consist of a context, a question, and a response area.



# HOT TEXT ITEMS

Require the student to either click on a response option or drag a response option to another location. Items consist of a context, a question, and a response area.

5 OP

Before the War of 1812, different groups were trying to reach their goals. These goals were part of what started the War of 1812.

Place the group label in the blank box next to their goal.

Drag your response to each answer box

available response options

Goals	Group
Wanted to gain northern and western land	?
Wanted to maintain control of forts and the fur trade	?
Resisted settlers moving into the region	?

Groups

American Indians	British
Americans	Mexicans
Texans	

# OPEN - RESPONSE ITEMS

Require the student to use the keyboard to enter a response into a text field. Different types of open-response items may appear on the test. Items consist on a context, a question, and a response area.

12



What is the resolution of the story?

Type your answer in the space provided.



Click in the text box and type your answer using the keyboard.

# MATCHING ITEMS

Require the student to check a box to indicate if information from a column header matches information from a row. Items consist of a context, a question, and a response area.

# TABLE ITEMS

Require the student to type numeric values into a given table. The student may complete the entire table or portions of the table depending on the question that is being asked. Items consist of a context, a question, and a response area.

# EDITING TASK ITEMS

Require the student to click on a highlighted word or phrase and enter a replacement word or phrase. Items consist of a context, a question, and a response area.

12 OP

Correct the highlighted mistake in the passage below.

In the theater itself, there are enough red velvet seats for 422 patrons. The aisles pull your gaze forward to the magnificent gold-colored curtains what conceal the screen. After everyone has taken a seat, the lights are dimmed, and aside, the screen lights up with black and white images from

Replace "what" with:

OK Cancel

# EDITING TASK CHOICE ITEMS

Require the student to click on a highlighted word or phrase and enter a replacement word or phrase. Items consist of a context, a question, and a response area.

17

Replace "better" with:

- most good
- most good
- more better
- best
- better

Correct the highlighted word in the reading excerpt below.

Juan declared that it was the better party ever. Eric felt special because he was the one who cracked the piñata.

# Something to make a note of...

- Items could combine more than one item type.

The figure shows a triangle ABC plotted on a Cartesian coordinate system. The x-axis and y-axis are labeled. Point A is located in the fourth quadrant, point B is in the second quadrant, and point C is in the third quadrant. Red line segments connect vertex A to vertices B and C, forming the triangle. The interface includes a toolbar with buttons for Delete, Add Point, and Connect Line, and a numeric keypad with various mathematical functions like sin, cos, and tan.

# FSA UPDATES

## Scoring and Reporting

- **Equating**—Student results from the different test forms are reviewed and compared to ensure that the level of difficulty is the same for each test form. This process, called “equating,” takes place after testing when enough student scores are in the system to ensure that a representative sample of student results is available for use in the comparison.
- **Scores**—For the first administration, students will receive two performance indicators: a T score and a percentile rank. The T score is a score on a scale of 20-80 with approximately 50 as the statewide average. Students will also receive a percentile rank, showing how they performed on each grade level/subject area test compared to all other students in Florida who took the same test. After achievement-level cut scores are established, districts will receive 2014-2015 FSA test results retrofitted to reflect student performance on the new score scale. For Algebra 1, a score linked to the NGSSS Algebra 1 EOC assessment will be provided.
- **Achievement Levels**—The success a student has achieved with the Florida Standards will be assessed by FSA ELA and Mathematics assessments and will be described by Achievement Levels that range from 1 (lowest) to 5 (highest). Level 3 indicates satisfactory performance. The level of performance required to score in each achievement level will be established prior to the spring 2016 administration.

For more information and help covering the FSA EOC, please go to

<http://www.fsassessments.org>