STAAR Spring 2025 Algebra 1
Answer Key

Item Position	Item Type	TEKS Assessed	Maximum Number of Points	Correct Answer(s)	Reporting Category	Readiness or Supporting
1	Multiple Choice	A1.1.10.D	1	C	1	Supporting
2	Multiple Choice	A1.5.9.D	1	D	5	Readiness
3	Multiple Choice	A1.1.11.A	1	B	1	Supporting
4	Multiple Choice	A1.3.2.I	1	A	3	Readiness
5	Multiple Choice	A1.4.6.A	1	B	4	Readiness
6	Drag and Drop	A1.3.2.C	2	$\frac{3}{2}$, −1 See Appendix 1.1	3	Readiness
7	Multiple Choice	A1.2.4.A	1	C	2	Supporting
8	Multiple Choice	A1.3.2.B	1	A	3	Supporting
9	Multiple Choice	A1.4.7.B	1	C	4	Supporting
10	Multiple Choice	A1.2.3.D	1	B	2	Readiness
11	Multiple Choice	A1.3.5.C	1	C	3	Readiness
12	Multiple Choice	A1.4.7.C	1	D	4	Readiness
13	Multiple Choice	A1.2.3.B	1	C	2	Readiness
14	Multiple Choice	A1.3.2.H	1	B	3	Supporting
15	Hot Spot	A1.4.7.A	1	Point at (0, −3) See Appendix 1.2	4	Readiness
16	Multiple Choice	A1.3.2.A	1	D	3	Readiness
17	Equation Editor	A1.1.12.B	1	68 See Appendix 1.3	1	Supporting
18	Multiple Choice	A1.5.9.C	1	C	5	Readiness
19	Multiple Choice	A1.2.3.C	1	C	2	Readiness
20	Multiple Choice	A1.1.10.E	1	D	1	Readiness
21	Multiple Choice	A1.4.7.A	1	A	4	Readiness
22	Drag and Drop	A1.3.2.E	2	$-\frac{3}{5}$, 3 See Appendix 1.4	3	Supporting
23	Multiple Choice	A1.1.10.B	1	C	1	Supporting

24	Multiple Choice	A1.3.5.C	1	D	3	Readiness
25	Multiselect	A1.2.4.C	2	B, E See Appendix 1.5	2	Supporting
26	Multiple Choice	A1.4.8.A	1	C	4	Readiness
27	Multiple Choice	A1.2.3.A	1	B	2	Supporting
28	Drag and Drop	A1.1.11.B	2	$\frac{1}{3}$, 15 See Appendix 1.6	1	Readiness
29	Multiple Choice	A1.3.5.A	1	B	3	Readiness
30	Graphing	A1.2.3.D	2	Dashed line going through (0, −3) and (1, 2), shading the area that includes the point (0, 0) See Appendix 1.7	2	Readiness
31	Multiple Choice	A1.1.12.E	1	D	1	Supporting
32	Multiple Choice	A1.4.6.A	1	A	4	Readiness
33	Graphing	A1.5.9.D	1	Exponential curve going through (0, 6) and (1, 2) with an asymptote of $y = 0$ See Appendix 1.8	5	Readiness
34	Multiple Choice	A1.3.2.I	1	C	3	Readiness
35	Multiple Choice	A1.2.3.C	1	D	2	Readiness
36	Drag and Drop	A1.4.8.A	2	−3, 2 See Appendix 1.9	4	Readiness
37	Multiple Choice	A1.3.2.A	1	B	3	Readiness
38	Multiple Choice	A1.2.3.H	1	A	2	Supporting
39	Inline Choice	A1.4.7.C	2	right, up See Appendix 1.10	4	Readiness
40	Multiple Choice	A1.1.12.C	1	D	1	Supporting
41	Multiple Choice	A1.4.6.B	1	A	4	Supporting
42	Multiple Choice	A1.3.2.C	1	C	3	Readiness
43	Multiple Choice	A1.5.9.E	1	A	5	Supporting

44	Multiselect	A1.1.10.E	2	B, D See Appendix 1.11	1	Readiness
45	Multiple Choice	A1.2.3.F	1	D	2	Supporting
46	Multiple Choice	A1.3.5.A	1	A	3	Readiness
47	Multiple Choice	A1.5.9.C	1	B	5	Readiness
48	Multiple Choice	A1.1.11.B	1	A	1	Readiness
49	Inline Choice	A1.5.9.B	2	26,080, decreasing, 15% See Appendix 1.12	5	Supporting
50	Multiple Choice	A1.2.3.B	1	A	2	Readiness

STAAR Spring 2025 Algebra 1 Appendix

1.1

The table represents some points on the graph of linear function f.

Linear Function

x	$f(x)$
-6	-10
-2	-4
4	5
10	14

What is the equation of function f in slope-intercept form?

Move the correct answer to each box. Not all answers will be used.

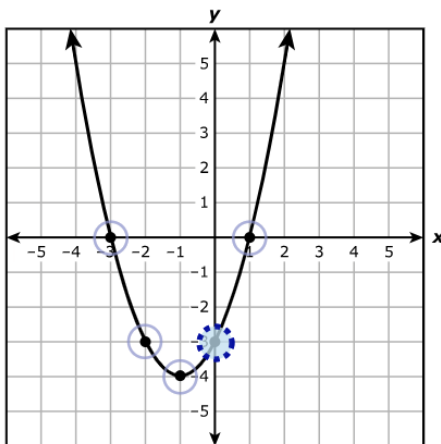| $-\dfrac{3}{2}$ | -1 | $\dfrac{1}{2}$ | 1 | $\dfrac{3}{2}$ | $\dfrac{7}{4}$ |

$f(x) = \boxed{\dfrac{3}{2}}\ x + \boxed{-1}$

1.2

A graph of a quadratic function is shown. Which location best represents the y-intercept of the function?

Select **ONE** correct answer.

1.3

A function is shown.

$$f(x) = 3(x - 4)^2 - 7$$

What is the value of $f(-1)$?

Enter your answer in the box provided.

68

←	→	↶	↷	⊗

1	2	3
4	5	6
7	8	9
	0	
.	-	▢/▢

1.4

The equation of line n is $y = -\frac{3}{5}x + 6$. Line p is parallel to line n and passes through the point (15, −6).

What is the equation of line p in slope-intercept form?

Move the correct answer to each box. Each answer may be used more than once. Not all answers will be used.

−31	−15	$-\frac{5}{3}$	$-\frac{3}{5}$	$\frac{3}{5}$	$\frac{5}{3}$	3	19

$y = \boxed{-\frac{3}{5}} x + \boxed{3}$

1.5

A restaurant owner experimented with different prices for the lunch special. The table shows the linear relationship between the price of the lunch special in dollars and the number of lunch specials sold on six different days.

Lunch Special

Price (dollars)	Number Sold
6.50	107
9.50	78
7.25	99
11.00	65
8.75	87
9.35	80

Based on the line of best fit, which predictions are true?

Select **TWO** correct answers.

☐ Approximately 82 lunch specials would be sold if the price were $5.00.

☑ Approximately 111 lunch specials would be sold if the price were $6.00.

☐ Approximately 102 lunch specials would be sold if the price were $7.50

☐ Approximately 74 lunch specials would be sold if the price were $12.50.

☑ Approximately 28 lunch specials would be sold if the price were $15.00.

1.6

In the expression shown, x is a positive real number.

$$\frac{2x^{12}}{6x^{-3}}$$

What is an equivalent form of this expression?

Move the correct answer to each box. Each answer may be used more than once. Not all answers will be used.

| −15 | −9 | −4 | $\frac{1}{3}$ | $\frac{1}{4}$ | 3 | 4 | 9 | 15 |

$\frac{1}{3}$ x [15]

1.7

What is the solution set for the inequality $y > 5x - 3$?

Graph the solution set of the linear inequality in the coordinate plane.

- First, select the Graph button to graph the line and choose the line style. To graph a line, select two points in the coordinate plane. A line will connect the points.

- Then select the Solution Set button to select the desired region.
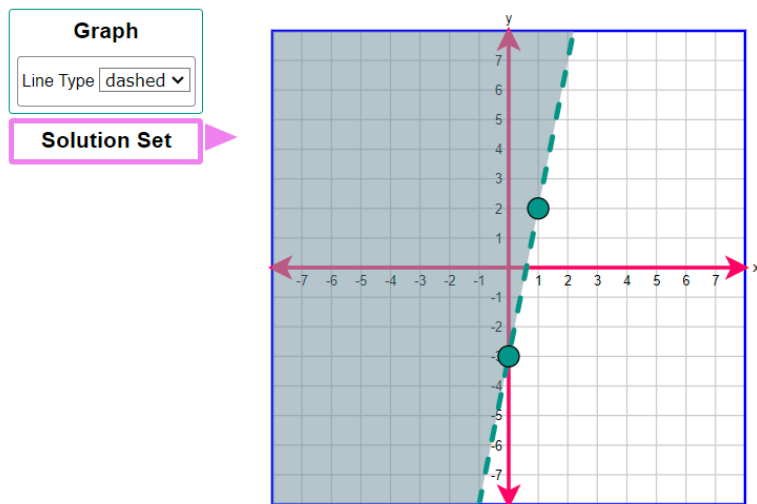
1.8

Graph the function $f(x) = 6\left(\frac{1}{3}\right)^x$.

Select the type of graph. Drag the two points and the asymptote, if applicable, to their correct positions.

Linear

Quadratic

Exponential
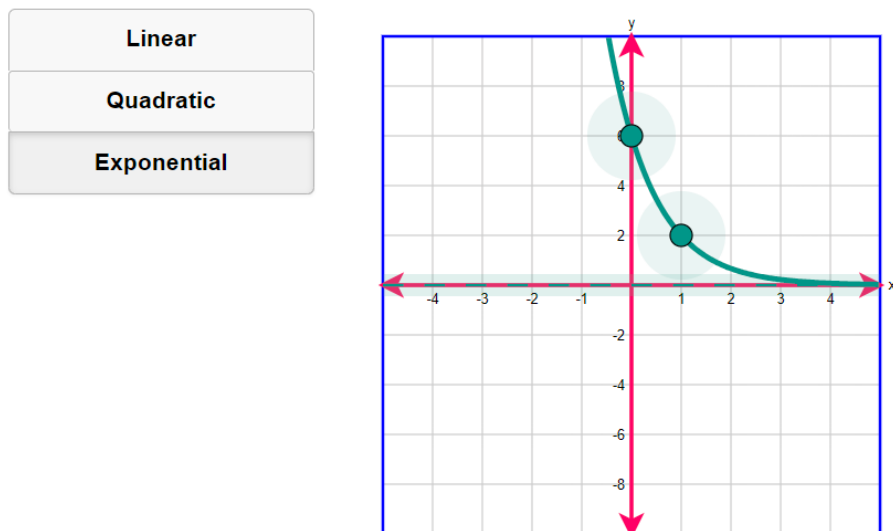
1.9

What are the solutions to the equation $(2x+1)^2 = 25$?

Move the correct answer to each box. Not all answers will be used.

-5   -3   -2   2   3   5

$x =$ -3

$x =$ 2

1.10

The quadratic function $f(x) = x^2$ is transformed to create the function $g(x) = f(x - 6) + 2$.

Choose the correct answer from each drop-down menu to complete the sentence.

The graph of f is translated 6 units [right ↕] and 2 units [up ↕] to create the graph of function g.

1.11

Which expressions are equivalent to $6x^2 + 3x - 9$?

Select **TWO** correct answers.

☐ $-3(2x^2 + x + 3)$

☑ $3(2x^2 + x - 3)$

☐ $3(2x - 3)(x + 1)$

☑ $3(2x + 3)(x - 1)$

☐ $-3(2x - 3)(x - 1)$

1.12

The population of a town can be modeled by the exponential function $P(t) = 26{,}080(0.85)^t$, where t represents the number of years since 2010.

Choose the correct answer from each drop-down menu to complete the sentences.

The initial population of the town in 2010 was ⌈26,080 ◇⌉.

The population is ⌈decreasing ◇⌉ at a rate of ⌈15% ◇⌉ per year.