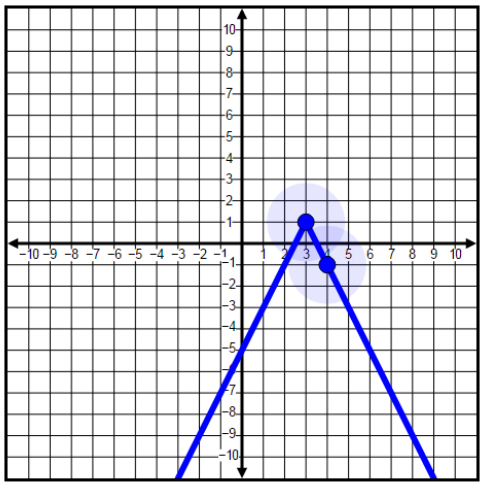
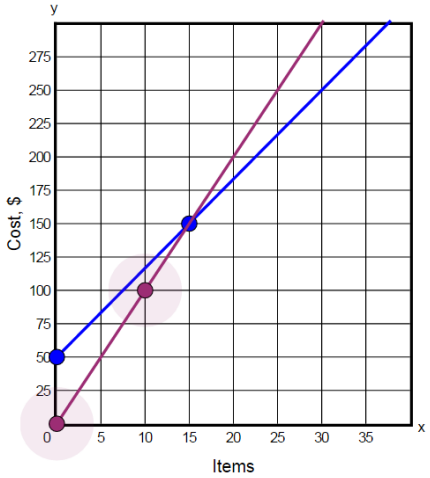
Released Test Answer and Alignment Document

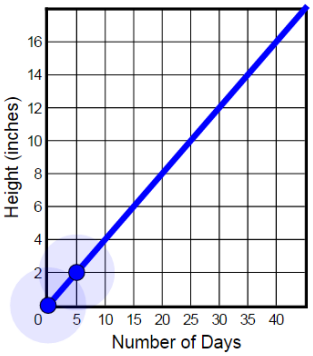
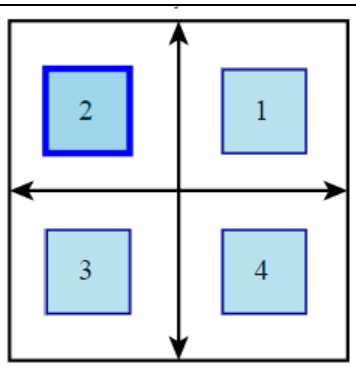
Mathematics – Algebra 1

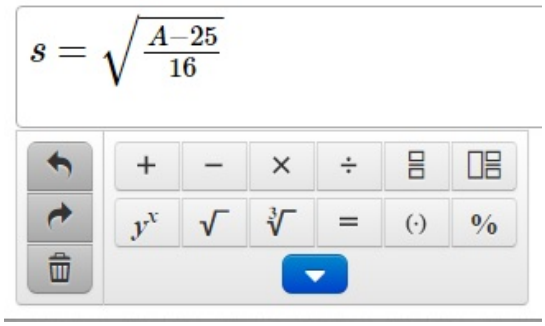
End of Year Assessment

Item Number	Answer Key	Evidence Statement Key	Integrated Course Alignment
1.	B, E, F	A-APR.3-1	Math 3
2.	C	A-REI.10	Math 1
3.	Part A: 1 Part B: D, E, F	A.Int.1	Math 3
4.	Select from the drop-down menus to correctly complete the sentences. The sum $\frac{1}{3} + \frac{\sqrt{5}}{3}$ is [irrational] because the sum [cannot] be expressed as a single fraction with a rational numerator and a rational denominator. The quotient $\frac{20}{\sqrt{16}}$ is [rational] because the quotient [is equal to an integer].	N-RN.B-1	Math 2
5.	C	F-IF.5-2	Math 2
6.	C	F-IF.6-6b	
7.	$f(x) = \frac{3}{4}x + -\frac{29}{4}$	F-LE.2-1	Math 1
8.	B, D, E	F-IF.9-1	
9.	B	A-SSE.1-2	Math 2
10.	C, D, E	A-APR.1-1	Math 2
11.	Initial number of people who receive the e-mail: 7 The factor by which the number of people who receive the e-mail increases each day: 2 The number of people who receive the e-mail on day n, where $n \geq 2$: $7(2^n)$	A-SSE.1-1	Math 1

12.	Part A: $w(t) = 0.25t + 11.25$ Part B: 4.5	F-LE.2-2	Math 1
13.	Part A: The median of Miguel's data is [greater than] the median of Shona's data, and the range of Miguel's data is [less than] the range of Shona's data. Part B: Approximately [75%] of Miguel's data values are greater than the median of Shona's data. Part C: A Part D: A, E	S-ID.Int.2	Math 2
14.	The country [Canada] had the greatest percentage of its students report being right-hand dominant with approximately [88%].	S-ID.5	Math 1
15.	Part A: C Part B: 242	HS-Int.3-2	
16.		F-IF.7b	Math 2
17.	B	F-IF.A.Int.1	Math 1

18.	To solve the equation $x^2 - x - 2 = 0$ for x by completing the square, a student could use the equivalent equation $(x -$ [1/2] $)^2 =$ [9/4] .	A-REI.4a-1	Math 2
19.	A, D	A-SSE.3a	Math 2
20.	The expression $(a^2)^2 - (b^2)^2$ is an example of [a difference of squares] . A, C, D	A-SSE.2-4	
21.	Part A: A, E Part B: A, B, C Part C: 9 Part D: 6	A-CED.3-1	Math 1
22.	Part A: B, E, F Part B: E, G	F-IF.4-1	
23.	Part A: B Part B: D	F-IF.2	Math 1
24.	Part A: The vertex of the parabola is 2 units [right of] the origin and 1 unit [up from] the origin. Part B: $f(x+3)$ has a [horizontal] shift 3 units [left of] $f(x)$.	F-BF.3-4	Math 2
25.	Part A:  Part B: 15	A-REI.6-1	Math 1

26.	Part A: 22 Part B: D  Part C: Part D: D	HS-Int.3-1	Math 1
27.	 : Student selects quadrant 2.	F-BF.3-1	Math 2
28.	c = 148.5 and d = 4 The appropriate domain for the function A is [the set of positive real numbers] ; the function is [increasing and linear] .	F-Int.1-1	
29.	-2	A-REI.11-1b	Math 1
30.	 	A-REI.3	Math 1
31.	C	A-SSE.3c-1	Math 2
32.	Part A: -10 Part B:  	HS-Int.2	

33.	B	A-REI.4b-1	Math 2
34.		A-CED.4-2	Math 2