
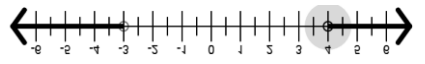


Released Test Answer and Alignment Document

Mathematics – Algebra I

Spring 2017

Item Number	Answer Key	Evidence Statement Key
1.	B	A-REI.12
2.	D	A-CED.4-1
3.	<div style="display: flex; justify-content: space-between; margin-bottom: 5px;"> <div style="border: 1px solid black; padding: 2px;">vertical line</div> $x = 2$ </div> <div style="display: flex; justify-content: space-between; margin-bottom: 5px;"> <div style="border: 1px solid black; padding: 2px;">horizontal line</div> $y = 2$ </div> <div style="display: flex; justify-content: space-between;"> <div style="border: 1px solid black; padding: 2px;">line containing the origin</div> $x + y = 0$ </div>	A-REI.10
4.	C, D	F-IF.A.Int.1
5.	Part A: B Part B: 36.50	A-REI.6-1
6.	C	A-SSE.1-1
7.	Part A: C Student response is 3 loaves of zucchini bread and 3 loaves of banana bread. Equivalent numbers can be accepted for both responses. Part B: D Part C: D Part D: 40	A-CED.3-1
8.	A, E	A-SSE.3b
9.	$(-2,3)$ and $(4,15)$	A-REI.11-1a
10.	See Rubric	HS-C.16.2
11.	$a=3$ and $b=2$	F-BF.3-1
12.	B, G	F-IF.1
13.	Part A:  Part B: 	F-IF.4-1
14.	-0.1	F-IF.6-1a
15.	$h(x) = 2(1.3)^x$ or equivalent expression	F-LE.2-1

16.	Part A: $12+2.2N$ Part B: C	F-Int.1-1
17.	Part A: $H = (-2 \text{ []})(d - 1)(d - 5 \text{ []})$ The largest value of d for which $H = 0$ is 5 [] . This value is the Part B: $\text{distance from the left end of the wall to point C. []}$	F-IF.8a

#10 Rubric

Score	Description
3	<p>Student response includes the following 3 elements.</p> <ul style="list-style-type: none"> • Reasoning component = 2 points <ul style="list-style-type: none"> ○ Two valid methods for solving the quadratic equation (at least one method must be algebraic). • Computation component = 1 point <ul style="list-style-type: none"> ○ Correct solution of $x = 3$. <p>Sample Student Response:</p> <p>One method could be factoring:</p> $2x^2 + 18 = 12x$ $2x^2 - 12x + 18 = 0$ $(2x - 6)(x - 3) = 0$ $2(x - 3)(x - 3) = 0$ $x - 3 = 0$ $x = 3$ <p>A second method could be graphing the equation.</p> <p>If I change the equation into a system: $y_1 = 2x^2 + 18$, $y_2 = 12x$, I can graph this on my calculator. These two equations intersect at (3, 36), so the equation has a solution at $x = 3$.</p> <p>Note:</p> <ul style="list-style-type: none"> • The student earns 1 reasoning point for each of the two methods used to solve the equation.
2	Student response includes 2 of the 3 elements.
1	Student response includes 1 of the 3 elements.
0	Student response is incorrect or irrelevant.