Unit 0: Linear Equations and Proportions

1	C	A.REI.1
2	B	A.CED.4
3	No, the student needs to switch the inequality symbol after dividing by -5 on both sides. The answer should read x > -12/5	A.REI.3
4	a.) P = 6r – 20 b.) $70	A.CED.2
5	a.) Multiply by A on both sides to get AP = F. Next, divide by P on both sides to isolate A. The answer is A = F/P b.) A = 2	A.CED.4
6	Samantha solved the equation incorrectly. She should have subtracted 11 on both sides instead of adding 11. The answer is x = 4	A.REI.3
7	166.7 seconds	A.CED.1
8	8 Toys	A.CED.1

Unit 1: Functions & Their Graphs Part 1

1.	D	F.BF.2
2.	B	F.IF.5
3.	C	F.IF.2
4.	B	F.IF.1
5.	C	F.IF.3
6.	D	F.IF.1
7.	D	F.IF.6
8.	C	F.IF.7
9.	2	F.IF.9
10.	6000	F.IF.6
11.	a.) Both gyms have a monthly fee as well as an initial charge. The initial charge for Big's Gym is less than the initial charge for Little's Gym. The monthly charge for Big's is more than the monthly charge for Little's. b.) Big Gym's graph will be steeper than Little's	F.IF.4 & F.IF.2
12.	a.) 40 triangles to complete 10 stages b.) Next = Now + 4	F.IF.2

13.	Domain: [0, 21] or $0 \leq x \leq 21$ Range: [0, 600] or $0 \leq y \leq 600$	F.IF.5
14.	C	F.IF.6
15.	a.) 18, 24, 30, 36 b.) f(x) = 6x + 6 c.) 9 weeks	F.LE.1

Unit 2: Systems of Equations and Inequalities

1.	6 and 5 or -6 and -5	A.REI.5
2.	C	A.REI.12
3.	D	A.REI.12
4.	B	A.REI.12 & A.CED.3
5.	40	A.REI.11
6.	294	A.REI.11
7.	Answers will vary. Possible answers: (-3, -2) and (-5, 0	A.REI.12
8.	Answers will vary. Possible answer: y = 2x + 1 and 4x – 2y = -2. I know there are infinitely many solutions because the lines coincide and will overlap forever.	A.REI.11
9.	a.) x + y $\leq$ 10 and 20x + 10y $\leq$ 100 b.) No, if Paul buys 6 flagpoles and 5 flags he exceeds the 10 total he can buy. This also exceeds the $100 he has to spend.	A.CED.3 & A.REI.12
10.	-6x + 9 will be substituted into the 2nd equation	A.REI.6

Unit 3: Descriptive Statistics

1.	D	S.ID.3
2.	D	S.ID.5
3.	C	S.ID.2
4.	B	S.ID.6
5.	A	S.ID.2
6.	A	S.ID.2
7.	C	S.ID.3
8.	A	S.ID.6
9.	A	S.ID.7
10.	C	S.ID.6
11.	D	S.ID.7

12.	D	S.ID.6
13.	C	S.ID.6
14.	A	S.ID.9
15.	a. True because 4% of 50 is 2 men. b. True, because 10 men and 6 women prefer sports for a difference of 4. c. True, 36% of men and women prefer dance. The other categories are 32% each. d. False, 32% of 50 is 16 not 18.	S.ID.5
16.	a.) Median is $54,000 b.) $Q_1 = 42,000$ and $Q_3 = 72,000$ c.) draw box & whisker plot: min = 28,000, Q_1 = 42,000, Median = 54,000, Q_3 = 72,000, Max = 125,000	S.ID.1
17.	a.) True, it decreased from 288.13 to 264 b.) False, it increased from 625 to 660 c.) False, it increased from 169 to 216.5 d.) True, it increased from 187.45 to 189.44	S.ID.3

Unit 4: Equations and Expressions

1.	B	A.CED.1
2.	A	A.CED.2
3.	D	N.RN.1
4.	D	A.REI.4 & A.SSE.2
5.	D	A.CED.4
6.	D	A.CED.2
7.	C	A.CED.2
8.	C	N.RN.1
9.	B	A.CED.3
10.	D	A.APR.1
11.	2 seconds	A.SSE.3 & A.REI.4
12.	1 mile/hour	N.Q.1
13.	16 years old	A.CED.1
14.	7 cm	A.APR.1 & A.CED.1

15.	10	A.CED.1
16.	It is not accurate because the measurements of the dimension of the tabletop are only as precise as the nearest tenth of a foot. Precision cannot be increased through calculations.	N.Q.3
17.	$x^2 - 4x - 12$	A.CED.2

Unit 5: Functions and Their Graphs Part 2

1.	B	F.BF.1
2.	B	F.IF.5
3.	A	F.BF.3
4.	A	F.IF.8
5.	A	F.BF.2
6.	C	F.IF.4 & F.IF.8
7.	A	F.BF.3
8.	B	F.IF.7
9.	D	F.IF.6 & F.LE.1
10.	C	F.IF.6
11.	11	F.IF.9
12.	4	F.LE.3
13.	The base shipping rate without any textbooks	F.IF.4
14.	60 movies per year	F.IF.6
15.	NEXT = NOW + 4 This is an arithmetic sequence because the common difference is 4	F.BF.2

Unit 6: Connecting Algebra & Geometry through Coordinates		
1.	A	G.GPE.5 & G.GPE.6
2.	C	G.GMD.3
3.	D	G.GPE.4
4.	A	G.GPE.5
5.	C	G.GPE.6
6.	B	G.CO.1
7.	64	G.GPE.7
8.	5	G.GMD.3
9.	If the point lies on the circle, the distance from the center to that point will be equal to 5 because the radius is 5.	G.GPE.4
10.	(-1.5, 0.5)	G.GPE.6
11.	12 units	G.GPE.7