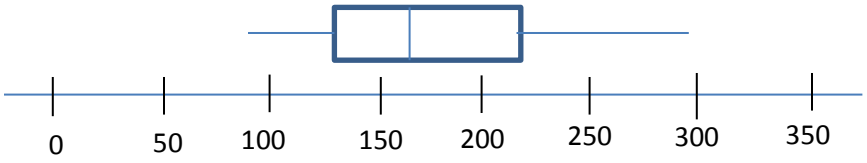
Math 3003
Data Analysis/Statistics Quiz/Study Guide **Solutions**

1. (a) 87.8 (b) 95 (c) 92 (d) 83 (e) 95 (f) 32 (g) 84
(h) 12

2.



Min = 89, Q_1 = 129, Med = 162, Q_3 = 219, Max = 299

3. (a) The acceptable range is (3, 47); there are no outliers.

(b)

*					
4	4				
*	5	6			
3	2	4			
*	5	5	8	9	9
2	0	0	3	3	4
*	5	6	6	8	9
1					

Key: 3 | 4 =34 g

4. (a) 34% (b) $2,200,000

5. (a) U.S. population growth over these 90 years is fairly steady, but it increases by more and more, indicating exponential rather than linear growth.

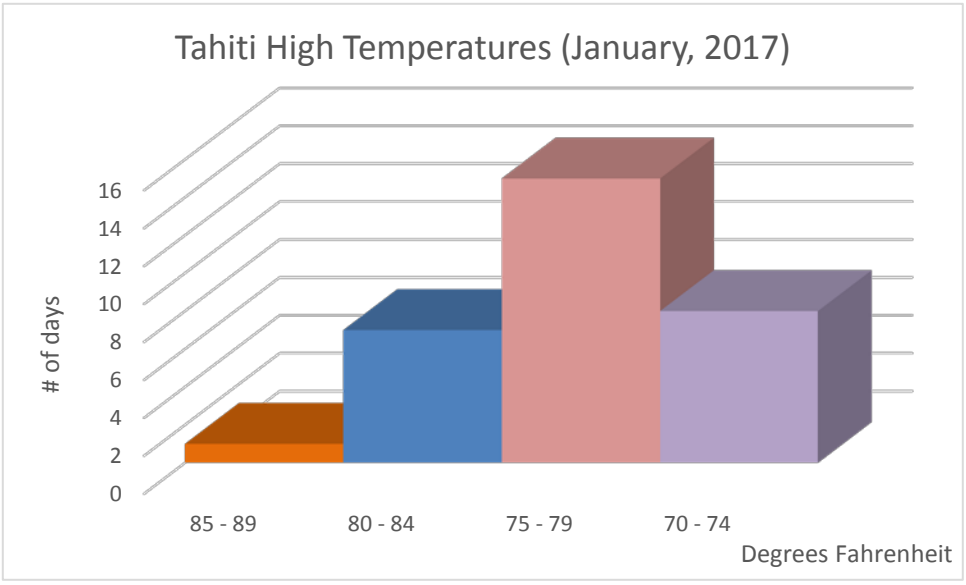
(b) 1980-2000 (c) Answers may vary.

6. (a) 35 kg (b) 50.8 kg

7. (a)

Temperatures (°F)	# of days	%
85 – 89	1	3
80 – 84	7	23
75 – 79	15	48
70 – 74	8	26

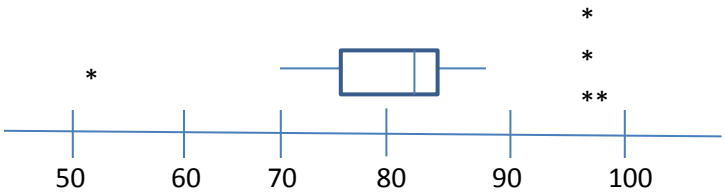
7. (b)



8. (a) 52, 70, 72, 72, 73, 75, 76, 76, 76, 77, 78, 80, 81, 81, 82, 82, 82, 82, 83, 83, 84, 84, 84, 85, 86, 88, 97, 97, 97, 98

(b) The acceptable range is (64, 96); the outliers are 52, 97, 97, 97, 98.

(c)



Min = 52, Q_1 = 76, Med = 82, Q_3 = 84, Max = 98
Outliers: 52, 97, 97, 97, 98

9. (a) Quiz scores and hours studied are positively associated (or correlated). As hours studied increases, quiz scores tend to increase.

(b) City gas mileage and weight of cars are negatively associated (or correlated). As weight of cars increase, city gas mileage decreases.

10. 10 hats

Do your best! Rise to the challenge! Live and learn!