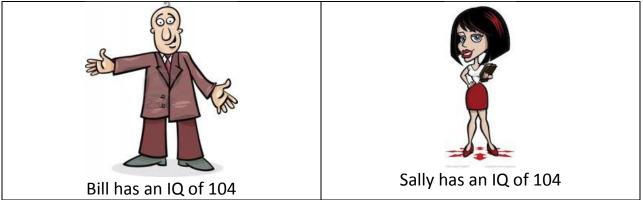
1. According to a paper by Jensen, A. R. and Reynolds, C. R. (1983), the mean IQ of females is 101.41 with a standard deviation of 13.55 and males had a mean IQ of 103.08 with a standard deviation of 14.54. Given:



Which person has a higher IQ relative to their respective sex?

2. The mean of adult male heights is 70 inches with a standard deviation of 3 inches and adult female heights have a mean of 64 inches with a standard deviation of 3 inches. Given:



Who is taller relative to their respective sex?

3. In 2005, the mathematics scores on the ACT test for males was 21.3 with a standard deviation of 5.3 and for females the mean was 20.2 with a standard deviation of 4.8. If Jill scored 21 on the ACT mathematics portion and David scored 21.8 then who scored higher relative to their gender. Are David and Jill's score usual or unusual? Why?

4. If the z score is equal to 1.23, mean is 73 and standard deviation is 10 then what was the original data point?

5. If the z score is equal to 2.01, standard deviation is 5.1, and original data point was 25 then what was the mean?

6. If the z score is equal to -1.5, mean is 82.1, and original data point was 80 then what was the standard deviation?

7. Given the following population data:

2	5	7	13	14	22	28	29	35	41
53	71	82	105	111	123	135	140	140	151
172	183	201	305						

Find the z-score of 135

8. Find the quartiles of the following data:

5	12	31	4	8	91	231	405	72	121
13	51	73	7	2	1	105	203	45	93
100	99	85	3	15	17	25	31	81	23

9. An electronics manufacturer has a production control policy that states that all parts that are not within 2 standard deviations of the mean must be scrapped. The mean of the pin pitch of a circuit chip is 2.54 with a standard deviation of 0.05 (pin pitch is the distance between the conductors to the PCB). Find the range of values that are not scrapped.



10. Given the following numbers:

2	13	14	21	33	45	73	82	91	103
115	116	121	130	147	201	305	311	321	323

Find the percentile of 91

11. Given the following numbers:

5	8	9	11	31	41	57	101	103	201
231	245	251	260	287	288	305	405	512	

Find the percentile of 9

12. Given the following numbers:											
	1	8	11	31	32	45	71	81	93	105	
	111	157	175	182	185	188	193	194	201		
Find th	Find the 20 th percentile										
13. Given the following numbers:											
	1	8	11	31	32	45	71	81	93	105	
	111	157	175	182	185	188	193	194	201		
Find th	ne 31 th p	ercentile	9								
14. Gi	ven the	followin	g numbe	ers:							
	5 12 13 17 21 45 47 48 53 1										
	110	201	217	301	357	361	392	395	401	405	
	417	431	455	501	515						
	a) Finc	l the qua	artiles								
	b) Find	the inte	erquartil	e range							
	c) Find	the sen	ni-interq	uartile r	ange						
	d) Find	I the mic	dquartile	2							
	e) Find the 10-90 percentile range										
15. Gi	ven the	followin	g popula	ation dat	ta:						
	5	7	13	18	18	19	20	25	32	42	
	51	85	87	91	103	104	110	112	153	512	

Determine the lower and upper fences. Then determine if there are any outliers