

Quiz: Normal Distribution and Standard Deviation

1 A group of 564 students has a mean age of 13.4 years with a standard deviation of 0.8 years. The ages are normally distributed. How many students are younger than 13.8 years? Express answer to the nearest student?

2 Find the percentage of the normally distributed data that lies within 1 standard deviations of the mean. (Refer graph 2 on page 1)

3 Nancy's scores in Chemistry this semester were rather inconsistent: 200, 115, 105, 95, 195, 200. For this population, how many scores are within one standard deviation of the mean?

4 A group of 652 students has a mean age of 13.6 years with a standard deviation of 0.2 years. The ages are normally distributed. How many students are younger than 13.7 years? Express answer to the nearest student?

5	number of children (x_i)	0	1	2	3	4
	number of Presidents (f_i)	8	7	5	3	1

6 Merry's scores in Chemistry this semester were rather inconsistent: 300, 245, 255, 285, 275, 300. For this population, how many scores are within one standard deviation of the mean?

7 A group of 852 students has a mean age of 13.8 years with a standard deviation of 0.6 years. The ages are normally distributed. How many students are younger than 14.1 years? Express answer to the nearest student?

8	number of children (x_i)	0	1	2	3	4
	number of Presidents (f_i)	3	8	5	2	9

9 Harry's scores in Chemistry this semester were rather inconsistent: 350, 300, 355, 315, 325, 350.

For this population, how many scores are within one standard deviation of the mean?

10 A group of 458 students has a mean age of 14.2 years with a standard deviation of 0.6 years. The ages are normally distributed. How many students are younger than 14.5 years? Express answer to the nearest student?

Circle # Correct	0	1	2	3	4	5	6	7	8	9	10
Percentage Score	0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%