

Standard Units

A distribution of heights follows the normal curve.

Convert to standard units a height that is 3.12 SDs below average.

Convert to standard units a height that is 0.37 SD above average.

Fill in the blanks.

Standard units	no. of SDs	above or below
2.31		
-0.84		

Scores on a test in a large class follow the normal curve with average equal to 65 and SD equal to 10.

Fill in the blanks.

Score	standard units	no. of SDs	above or below
44			
	2.40		
		3 SDS	below average
71			
	-0.3		
		2.8 SDS	above average

Continue, using scores that follow the normal curve with average 65 and SD 10.

- About what percent of the scores are below 88?
- What percent of the scores are within 1.4 SDs of the average?
- A certain score is 1.1 SDS above average.
What percent of the scores are within 1.4 SDs of that score?
- A student scored 0.2 SDs above average.
About what percent of the class scored below her?
- Twenty-one percent of the class scored below a certain student.
What was his score?
- About three-quarters of the class scored between a student who scored 0.9 SDs below average and a student who scored ____ SDs _____ average.
- True or False: Since this set of scores follows the normal curve, no one will ever score more than 4.45 SDs below average.