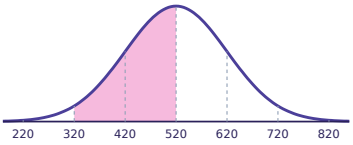
Normal Distributions & z-Scores · 1

The battery lifetimes in hours are normally distributed with mean 40 and standard deviation 5. Find the z-score of 45.

Normal Distributions & z-Scores · 2

About what percent of the data lies in the shaded region? (Use the 68-95-99.7 rule.)

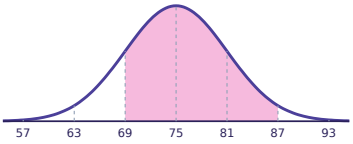


Normal Distributions & z-Scores · 3

The daily high temperatures in °F are normally distributed with mean 60 and standard deviation 7. Find the z-score of 39.

Normal Distributions & z-Scores · 4

About what percent of the data lies in the shaded region? (Use the 68-95-99.7 rule.)

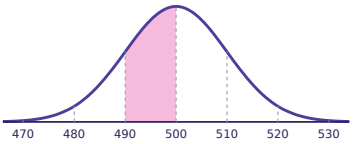


Normal Distributions & z-Scores · 5

The daily high temperatures in °F are normally distributed with mean 60 and standard deviation 7. Find the z-score of 53.

Normal Distributions & z-Scores · 6

About what percent of the data lies in the shaded region? (Use the 68-95-99.7 rule.)

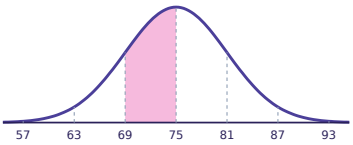


Normal Distributions & z-Scores · 7

The adult heights in inches are normally distributed with mean 66 and standard deviation 3. Find the z-score of 72.

Normal Distributions & z-Scores · 8

About what percent of the data lies in the shaded region? (Use the 68-95-99.7 rule.)



Normal Distributions & z-Scores · 2

ANSWER

47.5%

Normal Distributions & z-Scores · 1

ANSWER

1

Normal Distributions & z-Scores · 4

ANSWER

81.5%

Normal Distributions & z-Scores · 3

ANSWER

-3

Normal Distributions & z-Scores · 6

ANSWER

34%

Normal Distributions & z-Scores · 5

ANSWER

-1

Normal Distributions & z-Scores · 8

ANSWER

34%

Normal Distributions & z-Scores · 7

ANSWER

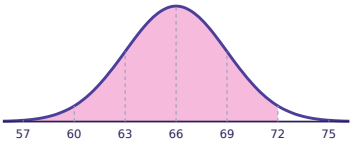
2

Normal Distributions & z-Scores · 9

The test scores are normally distributed with mean 75 and standard deviation 6. Find the z-score of 81.

Normal Distributions & z-Scores · 10

About what percent of the data lies in the shaded region? (Use the 68-95-99.7 rule.)

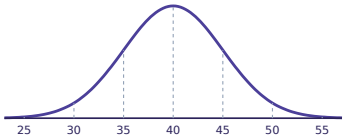


Normal Distributions & z-Scores · 11

The commute times in minutes are normally distributed with mean 30 and standard deviation 4. Which value has a z-score of 2.5?

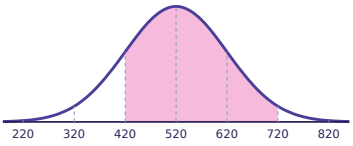
Normal Distributions & z-Scores · 12

The battery lifetimes in hours are normally distributed with mean 40 and standard deviation 5. About what percent of the data is above 30?



Normal Distributions & z-Scores · 13

About what percent of the data lies in the shaded region? (Use the 68-95-99.7 rule.)

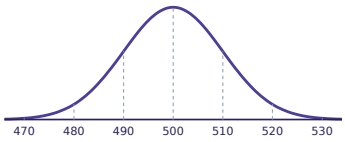


Normal Distributions & z-Scores · 14

The battery lifetimes in hours are normally distributed with mean 40 and standard deviation 5. Find the z-score of 50.

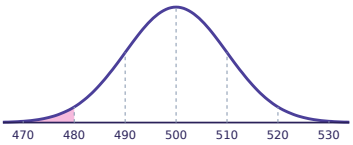
Normal Distributions & z-Scores · 15

The cereal box weights in grams are normally distributed with mean 500 and standard deviation 10. About what percent of the data is above 520?



Normal Distributions & z-Scores · 16

About what percent of the data lies in the shaded region? (Use the 68-95-99.7 rule.)



Normal Distributions & z-Scores · 10

ANSWER

97.35%

Normal Distributions & z-Scores · 9

ANSWER

1

Normal Distributions & z-Scores · 12

ANSWER

97.5%

Normal Distributions & z-Scores · 11

ANSWER

40

Normal Distributions & z-Scores · 14

ANSWER

2

Normal Distributions & z-Scores · 13

ANSWER

81.5%

Normal Distributions & z-Scores · 16

ANSWER

2.35%

Normal Distributions & z-Scores · 15

ANSWER

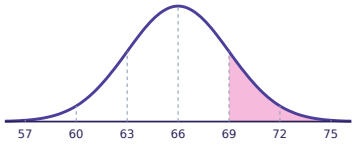
2.5%

Normal Distributions & z-Scores · 17

The cereal box weights in grams are normally distributed with mean 500 and standard deviation 10. Find the z-score of 485.

Normal Distributions & z-Scores · 18

About what percent of the data lies in the shaded region? (Use the 68-95-99.7 rule.)

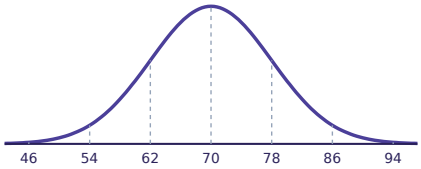


Normal Distributions & z-Scores · 19

The test scores are normally distributed with mean 75 and standard deviation 6. Which value has a z-score of -1?

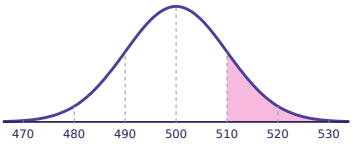
Normal Distributions & z-Scores · 20

The test scores are normally distributed with mean 70 and standard deviation 8. About what percent of the data is above 46?



Normal Distributions & z-Scores · 21

About what percent of the data lies in the shaded region? (Use the 68-95-99.7 rule.)

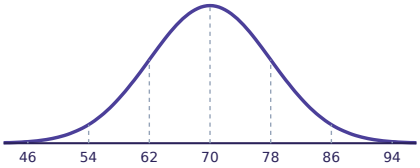


Normal Distributions & z-Scores · 22

The SAT math scores are normally distributed with mean 520 and standard deviation 100. Find the z-score of 720.

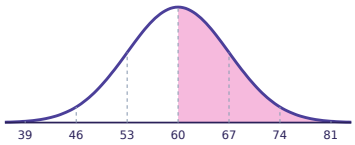
Normal Distributions & z-Scores · 23

The test scores are normally distributed with mean 70 and standard deviation 8. About what percent of the data is above 62?



Normal Distributions & z-Scores · 24

About what percent of the data lies in the shaded region? (Use the 68-95-99.7 rule.)



Normal Distributions & z-Scores · 18

ANSWER

15.85%

Normal Distributions & z-Scores · 17

ANSWER

-1.5

Normal Distributions & z-Scores · 20

ANSWER

99.85%

Normal Distributions & z-Scores · 19

ANSWER

69

Normal Distributions & z-Scores · 22

ANSWER

2

Normal Distributions & z-Scores · 21

ANSWER

15.85%

Normal Distributions & z-Scores · 24

ANSWER

49.85%

Normal Distributions & z-Scores · 23

ANSWER

84%