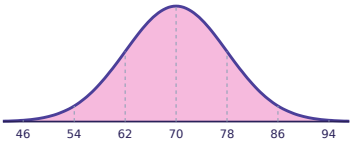
Normal Distributions & z-Scores · 1

The commute times in minutes are normally distributed with mean 30 and standard deviation 4. Find the z-score of 40.

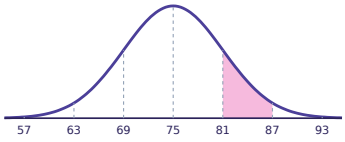
Normal Distributions & z-Scores · 2

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



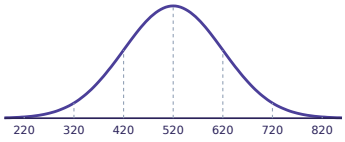
Normal Distributions & z-Scores · 3

The test scores are normally distributed with mean 75 and standard deviation 6. Out of 400 values, about how many are between 81 and 87?



Normal Distributions & z-Scores · 4

The SAT math scores are normally distributed with mean 520 and standard deviation 100. About what percent of the data is above 420?

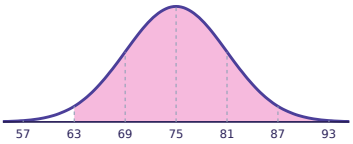


Normal Distributions & z-Scores · 5

The SAT math scores are normally distributed with mean 520 and standard deviation 100. Which value has a z-score of -2.5?

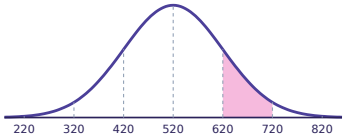
Normal Distributions & z-Scores · 6

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



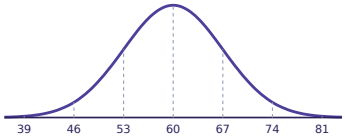
Normal Distributions & z-Scores · 7

The SAT math scores are normally distributed with mean 520 and standard deviation 100. Out of 600 values, about how many are between 620 and 720?



Normal Distributions & z-Scores · 8

The daily high temperatures in °F are normally distributed with mean 60 and standard deviation 7. About what percent of the data is above 39?



Normal Distributions & z-Scores · 2

ANSWER

99.7%

Normal Distributions & z-Scores · 1

ANSWER

2.5

Normal Distributions & z-Scores · 4

ANSWER

84%

Normal Distributions & z-Scores · 3

ANSWER

54

Normal Distributions & z-Scores · 6

ANSWER

97.35%

Normal Distributions & z-Scores · 5

ANSWER

270

Normal Distributions & z-Scores · 8

ANSWER

99.85%

Normal Distributions & z-Scores · 7

ANSWER

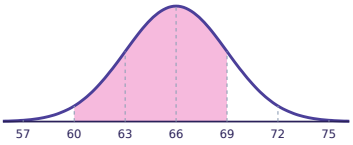
81

Normal Distributions & z-Scores · 9

The cereal box weights in grams are normally distributed with mean 500 and standard deviation 10. Find the z-score of 525.

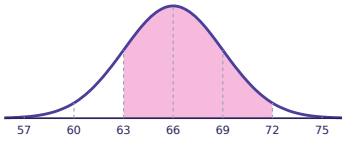
Normal Distributions & z-Scores · 10

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



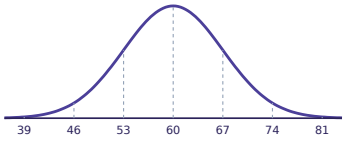
Normal Distributions & z-Scores · 11

The adult heights in inches are normally distributed with mean 66 and standard deviation 3. Out of 200 values, about how many are between 63 and 72?



Normal Distributions & z-Scores · 12

The daily high temperatures in °F are normally distributed with mean 60 and standard deviation 7. About what percent of the data is above 81?

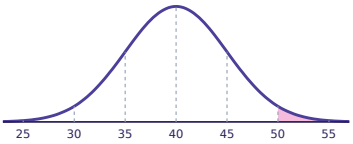


Normal Distributions & z-Scores · 13

The test scores are normally distributed with mean 70 and standard deviation 8. Which value has a z-score of -1?

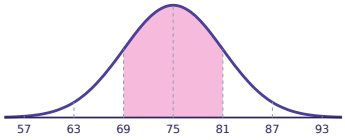
Normal Distributions & z-Scores · 14

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



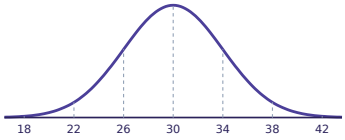
Normal Distributions & z-Scores · 15

The test scores are normally distributed with mean 75 and standard deviation 6. Out of 2000 values, about how many are between 69 and 81?



Normal Distributions & z-Scores · 16

The commute times in minutes are normally distributed with mean 30 and standard deviation 4. About what percent of the data is above 38?



Normal Distributions & z-Scores · 10

ANSWER

81.5%

Normal Distributions & z-Scores · 9

ANSWER

2.5

Normal Distributions & z-Scores · 12

ANSWER

0.15%

Normal Distributions & z-Scores · 11

ANSWER

163

Normal Distributions & z-Scores · 14

ANSWER

2.35%

Normal Distributions & z-Scores · 13

ANSWER

62

Normal Distributions & z-Scores · 16

ANSWER

2.5%

Normal Distributions & z-Scores · 15

ANSWER

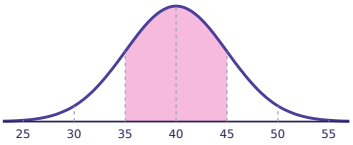
1360

Normal Distributions & z-Scores · 17

The SAT math scores are normally distributed with mean 520 and standard deviation 100. Find the z-score of 620.

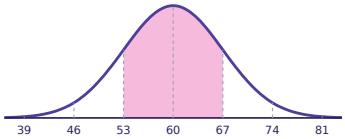
Normal Distributions & z-Scores · 18

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



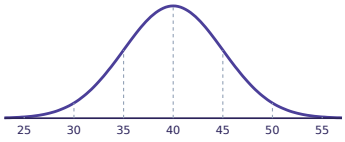
Normal Distributions & z-Scores · 19

The daily high temperatures in °F are normally distributed with mean 60 and standard deviation 7. Out of 2000 values, about how many are between 53 and 67?



Normal Distributions & z-Scores · 20

The battery lifetimes in hours are normally distributed with mean 40 and standard deviation 5. About what percent of the data is above 25?

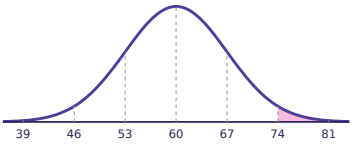


Normal Distributions & z-Scores · 21

The daily high temperatures in °F are normally distributed with mean 60 and standard deviation 7. Which value has a z-score of -1?

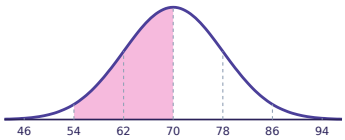
Normal Distributions & z-Scores · 22

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



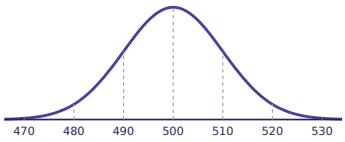
Normal Distributions & z-Scores · 23

The test scores are normally distributed with mean 70 and standard deviation 8. Out of 2000 values, about how many are between 54 and 70?



Normal Distributions & z-Scores · 24

The cereal box weights in grams are normally distributed with mean 500 and standard deviation 10. About what percent of the data is above 490?



Normal Distributions & z-Scores · 18

ANSWER

68%

Normal Distributions & z-Scores · 17

ANSWER

1

Normal Distributions & z-Scores · 20

ANSWER

99.85%

Normal Distributions & z-Scores · 19

ANSWER

1360

Normal Distributions & z-Scores · 22

ANSWER

2.35%

Normal Distributions & z-Scores · 21

ANSWER

53

Normal Distributions & z-Scores · 24

ANSWER

84%

Normal Distributions & z-Scores · 23

ANSWER

950