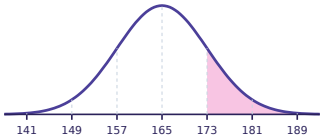
Normal Distribution & z-Scores · 1

The daily commute times (minutes) are normally distributed with mean 32 and standard deviation 5. Find the z-score of a commute of 27.

Normal Distribution & z-Scores · 2

The adult heights (cm) are normally distributed with mean 165 and standard deviation 8. Use the 68-95-99.7 rule: what percent of the data lies between 173 and 189?



Normal Distribution & z-Scores · 3

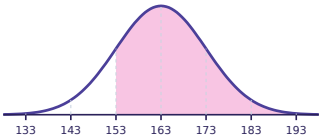
The exam scores are normally distributed with mean 61 and standard deviation 5. What value has a z-score of 3?

Normal Distribution & z-Scores · 4

The exam scores are normally distributed with mean 62 and standard deviation 10. What value has a z-score of -2.5?

Normal Distribution & z-Scores · 5

The adult heights (cm) are normally distributed with mean 163 and standard deviation 10. Use the 68-95-99.7 rule: what percent of the data lies between 153 and 193?



Normal Distribution & z-Scores · 6

The battery lifetimes (hours) are normally distributed with mean 540 and standard deviation 30. What value has a z-score of 2?

Normal Distribution & z-Scores · 7

The exam scores are normally distributed with mean 77 and standard deviation 6. Find the z-score of a score of 59.

Normal Distribution & z-Scores · 8

The adult heights (cm) are normally distributed with mean 180 and standard deviation 4. Find the z-score of a height of 182.

Normal Distribution & z-Scores · 2

ANSWER

15.85

Normal Distribution & z-Scores · 1

ANSWER

-1

Normal Distribution & z-Scores · 4

ANSWER

37

Normal Distribution & z-Scores · 3

ANSWER

76

Normal Distribution & z-Scores · 6

ANSWER

600

Normal Distribution & z-Scores · 5

ANSWER

83.85

Normal Distribution & z-Scores · 8

ANSWER

0.5

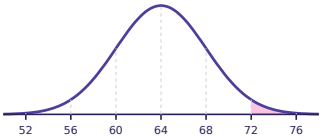
Normal Distribution & z-Scores · 7

ANSWER

-3

Normal Distribution & z-Scores · 9

The exam scores are normally distributed with mean 64 and standard deviation 4. Use the 68-95-99.7 rule: what percent of the data lies above 72?

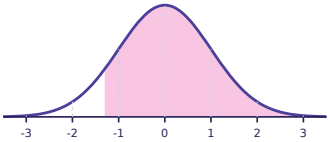


Normal Distribution & z-Scores · 10

The daily commute times (minutes) are normally distributed with mean 32 and standard deviation 6. What value has a z-score of -1.5?

Normal Distribution & z-Scores · 11

Z is a standard normal variable. Find P(Z > -1.30). Round to four decimal places.

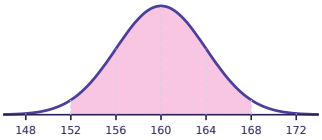


Normal Distribution & z-Scores · 12

The daily commute times (minutes) are normally distributed with mean 26 and standard deviation 5. Find the z-score of a commute of 16.

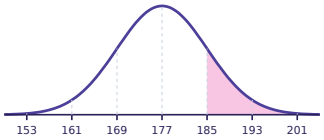
Normal Distribution & z-Scores · 13

The adult heights (cm) are normally distributed with mean 160 and standard deviation 4. Use the 68-95-99.7 rule: what percent of the data lies between 152 and 168?



Normal Distribution & z-Scores · 14

The adult heights (cm) are normally distributed with mean 177 and standard deviation 8. Use the 68-95-99.7 rule: what percent of the data lies between 185 and 201?

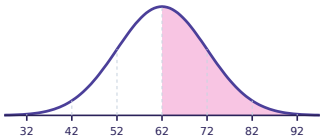


Normal Distribution & z-Scores · 15

The battery lifetimes (hours) are normally distributed with mean 590 and standard deviation 40. Find the z-score of a lifetime of 490.

Normal Distribution & z-Scores · 16

The exam scores are normally distributed with mean 62 and standard deviation 10. Use the 68-95-99.7 rule: what percent of the data lies above 62?



Normal Distribution & z-Scores · 10

ANSWER

23

Normal Distribution & z-Scores · 9

ANSWER

2.5

Normal Distribution & z-Scores · 12

ANSWER

-2

Normal Distribution & z-Scores · 11

ANSWER

0.9032

Normal Distribution & z-Scores · 14

ANSWER

15.85

Normal Distribution & z-Scores · 13

ANSWER

95

Normal Distribution & z-Scores · 16

ANSWER

50

Normal Distribution & z-Scores · 15

ANSWER

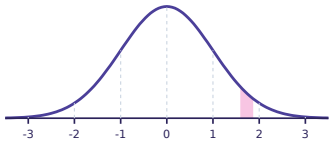
-2.5

Normal Distribution & z-Scores · 17

The daily commute times (minutes) are normally distributed with mean 29 and standard deviation 4. What value has a z-score of 1.5?

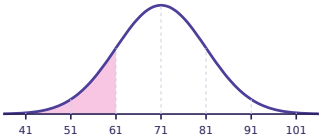
Normal Distribution & z-Scores · 18

Z is a standard normal variable. Find P(1.59 < Z < 1.87). Round to four decimal places.



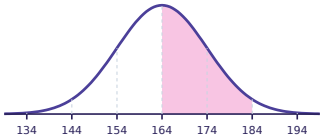
Normal Distribution & z-Scores · 19

The exam scores are normally distributed with mean 71 and standard deviation 10. Use the 68-95-99.7 rule: what percent of the data lies between 41 and 61?



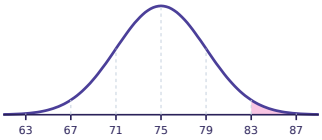
Normal Distribution & z-Scores · 20

The adult heights (cm) are normally distributed with mean 164 and standard deviation 10. Use the 68-95-99.7 rule: what percent of the data lies between 164 and 184?



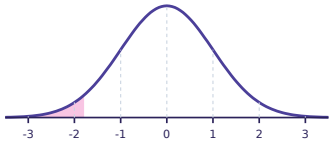
Normal Distribution & z-Scores · 21

The exam scores are normally distributed with mean 75 and standard deviation 4. Use the 68-95-99.7 rule: what percent of the data lies between 83 and 87?



Normal Distribution & z-Scores · 22

Z is a standard normal variable. Find P(Z < -1.79). Round to four decimal places.



Normal Distribution & z-Scores · 23

The adult heights (cm) are normally distributed with mean 171 and standard deviation 6. Find the z-score of a height of 156.

Normal Distribution & z-Scores · 24

The daily commute times (minutes) are normally distributed with mean 33 and standard deviation 5. What value has a z-score of 1.5?

Normal Distribution & z-Scores · 18

ANSWER

0.0252

Normal Distribution & z-Scores · 17

ANSWER

35

Normal Distribution & z-Scores · 20

ANSWER

47.5

Normal Distribution & z-Scores · 19

ANSWER

15.85

Normal Distribution & z-Scores · 22

ANSWER

0.0367

Normal Distribution & z-Scores · 21

ANSWER

2.35

Normal Distribution & z-Scores · 24

ANSWER

40.5

Normal Distribution & z-Scores · 23

ANSWER

-2.5