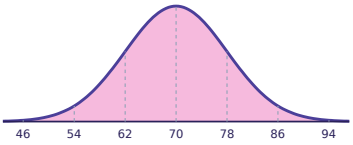
Normal Distributions & z-Scores · 1

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

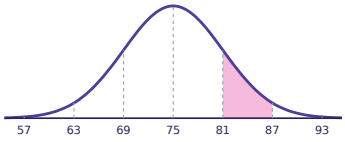
Normal Distributions & z-Scores · 2

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



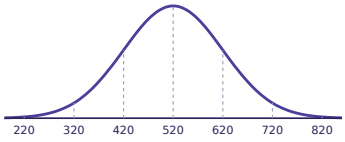

Normal Distributions & z-Scores · 3

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?

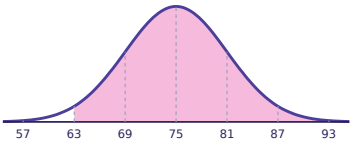



Normal Distributions & z-Scores · 5

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

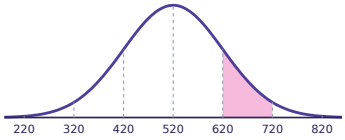
Normal Distributions & z-Scores · 6

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



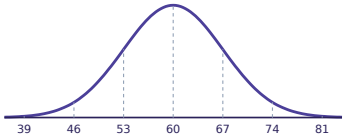

Normal Distributions & z-Scores · 7

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**

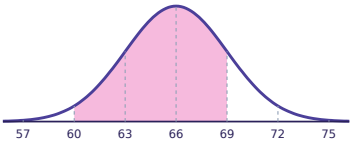
**81**

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.

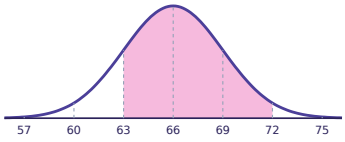
Normal Distributions & z-Scores · 10

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



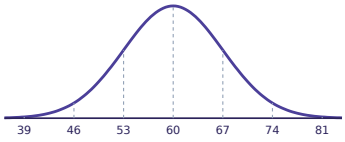

Normal Distributions & z-Scores · 11

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?

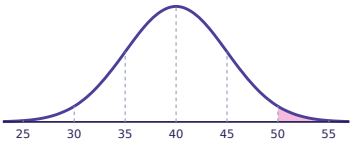



Normal Distributions & z-Scores · 13

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

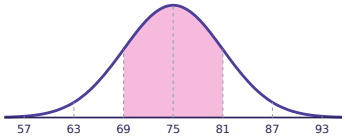
Normal Distributions & z-Scores · 14

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



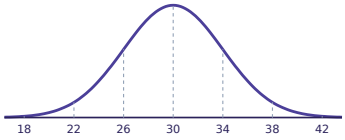

Normal Distributions & z-Scores · 15

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**

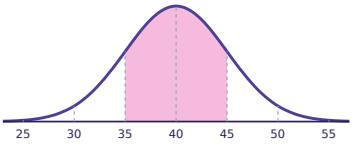
**1360**

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.

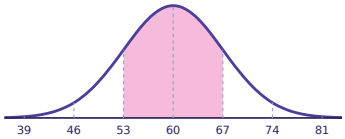
Normal Distributions & z-Scores · 18

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



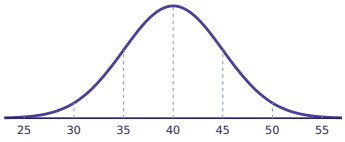

Normal Distributions & z-Scores · 19

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?

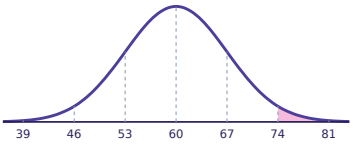



Normal Distributions & z-Scores · 21

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

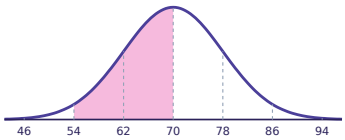
Normal Distributions & z-Scores · 22

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



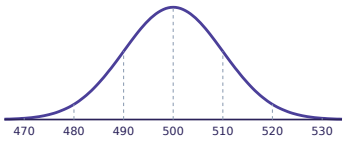

Normal Distributions & z-Scores · 23

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**