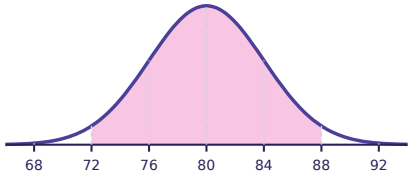
Task card 1 Normal Distribution & z-Scores

The daily commute times (minutes) are normally distributed with mean 27 and standard deviation 5. Find the z-score of a commute of 37.

Task card 2 Normal Distribution & z-Scores

The exam scores are normally distributed with mean 80 and standard deviation 4. Use the 68-95-99.7 rule: what percent of the data lies between 72 and 88?



Task card 3 Normal Distribution & z-Scores

The battery lifetimes (hours) are normally distributed with mean 430 and standard deviation 50. Find the z-score of a lifetime of 330.

Task card 4 Normal Distribution & z-Scores

The daily commute times (minutes) are normally distributed with mean 36 and standard deviation 4. Find the z-score of a commute of 44.

Task card 5 Normal Distribution & z-Scores

The adult heights (cm) are normally distributed with mean 175 and standard deviation 4. Find the z-score of a height of 179.

Task card 6 Normal Distribution & z-Scores

The adult heights (cm) are normally distributed with mean 164 and standard deviation 4. Find the z-score of a height of 156.

Task card 7 Normal Distribution & z-Scores

The daily commute times (minutes) are normally distributed with mean 35 and standard deviation 6. Find the z-score of a commute of 29.

Task card 8 Normal Distribution & z-Scores

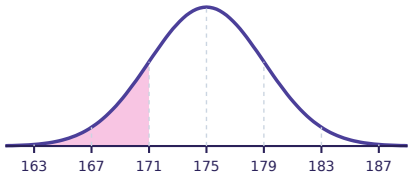
The battery lifetimes (hours) are normally distributed with mean 540 and standard deviation 40. Find the z-score of a lifetime of 500.

Task card 9 Normal Distribution & z-Scores

The adult heights (cm) are normally distributed with mean 176 and standard deviation 4. Find the z-score of a height of 184.

Task card 10 Normal Distribution & z-Scores

The adult heights (cm) are normally distributed with mean 175 and standard deviation 4. Use the 68-95-99.7 rule: what percent of the data lies below 171?



Task card 11 Normal Distribution & z-Scores

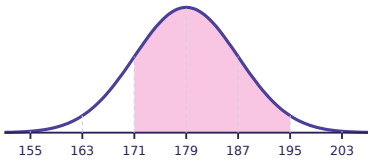
The battery lifetimes (hours) are normally distributed with mean 540 and standard deviation 50. Find the z-score of a lifetime of 490.

Task card 12 Normal Distribution & z-Scores

The daily commute times (minutes) are normally distributed with mean 38 and standard deviation 6. Find the z-score of a commute of 53.

Task card 13 Normal Distribution & z-Scores

The adult heights (cm) are normally distributed with mean 179 and standard deviation 8. Use the 68-95-99.7 rule: what percent of the data lies between 171 and 195?

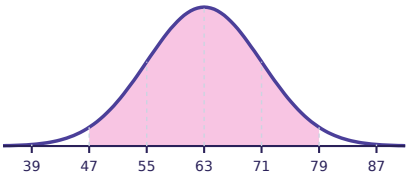


Task card 14 Normal Distribution & z-Scores

The exam scores are normally distributed with mean 70 and standard deviation 6. What value has a z-score of 1?

Task card 15 Normal Distribution & z-Scores

The exam scores are normally distributed with mean 63 and standard deviation 8. Use the 68-95-99.7 rule: what percent of the data lies between 47 and 79?

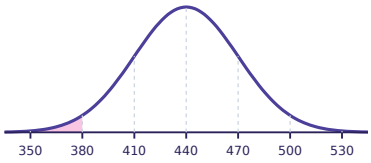


Task card 16 Normal Distribution & z-Scores

The exam scores are normally distributed with mean 71 and standard deviation 4. What value has a z-score of 2?

Task card 17 Normal Distribution & z-Scores

The battery lifetimes (hours) are normally distributed with mean 440 and standard deviation 30. Use the 68-95-99.7 rule: what percent of the data lies below 380?



Task card 18 Normal Distribution & z-Scores

The adult heights (cm) are normally distributed with mean 176 and standard deviation 6. Find the z-score of a height of 164.

Task card 19 Normal Distribution & z-Scores

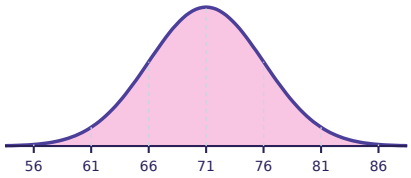
The adult heights (cm) are normally distributed with mean 161 and standard deviation 6. Find the z-score of a height of 155.

Task card 20 Normal Distribution & z-Scores

The exam scores are normally distributed with mean 69 and standard deviation 10. Find the z-score of a score of 79.

Task card 21 Normal Distribution & z-Scores

The exam scores are normally distributed with mean 71 and standard deviation 5. Use the 68-95-99.7 rule: what percent of the data lies between 56 and 86?



Task card 22 Normal Distribution & z-Scores

The daily commute times (minutes) are normally distributed with mean 37 and standard deviation 8. Find the z-score of a commute of 53.

Task card 23 Normal Distribution & z-Scores

The battery lifetimes (hours) are normally distributed with mean 480 and standard deviation 50. Find the z-score of a lifetime of 430.

Task card 24 Normal Distribution & z-Scores

The daily commute times (minutes) are normally distributed with mean 41 and standard deviation 8. Find the z-score of a commute of 25.

Normal Distribution & z-Scores Task Cards

Recording sheet · Grade 12 · Solve each problem. Give percents as numbers (like 81.5) and probabilities to four decimal places.

Name: _____ Date: _____

Scan to check your answers

1	2	3	4
5	6	7	8
9	10	11	12
13	14	15	16
17	18	19	20
21	22	23	24

Normal Distribution & z-Scores Task Cards: Answer Key

Grade 12 · Easy

The answers online

1. 2	**2.** 95	**3.** -2
4. 2	**5.** 1	**6.** -2
7. -1	**8.** -1	**9.** 2
10. 16	**11.** -1	**12.** 2.5
13. 81.5	**14.** 76	**15.** 95
16. 79	**17.** 2.5	**18.** -2
19. -1	**20.** 1	**21.** 99.7
22. 2	**23.** -1	**24.** -2