

If you belong to a normally distributed population with a mean height of 160 cm, and a standard deviation of 10 cm. What is the probability that your – height is 160 cm or taller?

- a. 68%
- b. 99.7%
- c. 100%
- d. Cannot be determined
- e. 50%

Answer: e

Which of the following statements is correct regarding measures of central tendency?

- a. Mean, median, and mode are always different regardless of normality
- b. Median is the same as Q_1 .
- c. A sample can only have one mode
- d. Mean, median, and mode are always the same regardless of normality.
- e. Mean is more sensitive to extreme values than median.

Answer: e



3. The women's Hemoglobin level in Jordan is normally distributed, with a mean of 13.75 g/dl and a standard deviation of 1 g/dl. If a woman with a Hemoglobin level of 11.99 g/dl or less is considered anemic, what is the percentage of anemic women in Jordan?

$[z = (x - \mu) / \sigma]$. Use the section of Z-Table below.

z	.00	.01	.02	.03	.04	.05	.06	.07	.08
-3.4	.0003	.0003	.0003	.0003	.0003	.0003	.0003	.0003	.0003
-3.3	.0005	.0005	.0005	.0004	.0004	.0004	.0004	.0004	.0004
-3.2	.0007	.0007	.0006	.0006	.0006	.0006	.0006	.0005	.0005
-3.1	.0010	.0009	.0009	.0009	.0008	.0008	.0008	.0008	.0007
-3.0	.0013	.0013	.0013	.0012	.0012	.0011	.0011	.0011	.0010
-2.9	.0019	.0018	.0018	.0017	.0016	.0016	.0015	.0015	.0014
-2.8	.0026	.0025	.0024	.0023	.0023	.0022	.0021	.0021	.0020
-2.7	.0035	.0034	.0033	.0032	.0031	.0030	.0029	.0028	.0027
-2.6	.0047	.0045	.0044	.0043	.0041	.0040	.0039	.0038	.0037
-2.5	.0062	.0060	.0059	.0057	.0055	.0054	.0052	.0051	.0049
-2.4	.0082	.0080	.0078	.0075	.0073	.0071	.0069	.0068	.0066
-2.3	.0107	.0104	.0102	.0099	.0096	.0094	.0091	.0089	.0087
-2.2	.0139	.0136	.0132	.0129	.0125	.0122	.0119	.0116	.0113
-2.1	.0179	.0174	.0170	.0166	.0162	.0158	.0154	.0150	.0146
-2.0	.0228	.0222	.0217	.0212	.0207	.0202	.0197	.0192	.0188
-1.9	.0287	.0281	.0274	.0268	.0262	.0256	.0250	.0244	.0239
-1.8	.0359	.0351	.0344	.0336	.0329	.0322	.0314	.0307	.0301
-1.7	.0446	.0436	.0427	.0418	.0409	.0401	.0392	.0384	.0375
-1.6	.0548	.0537	.0526	.0516	.0505	.0495	.0485	.0475	.0465
-1.5	.0668	.0655	.0643	.0630	.0618	.0606	.0594	.0582	.0571
-1.4	.0808	.0793	.0778	.0764	.0749	.0735	.0721	.0708	.0694
-1.3	.0968	.0951	.0934	.0918	.0901	.0885	.0869	.0853	.0838
-1.2	.1151	.1131	.1112	.1093	.1075	.1056	.1038	.1020	.1003
-1.1	.1357	.1335	.1314	.1292	.1271	.1251	.1230	.1210	.1190
-1.0	.1587	.1562	.1539	.1515	.1492	.1469	.1446	.1423	.1401

- a. .4%
- b. .039%
- c. 39.2%
- d. 3.92%
- e. .04%

Answer:d

4. To determine the effectiveness of influenza vaccines in elderly people, a group of vaccinated elderly, and another group of unvaccinated elderly were studied. They were followed up to for developing influenza. The results suggest that the elderly who are vaccinated had a reduced risk of hospitalization for pneumonia. What study design is this?

- a. Case-control study
- b. Ecological study.
- c. Randomized controlled clinical trial (RCT).
- d. Cross-sectional
- e. Cohort study

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Answer : e

When a researcher accepts null hypothesis when it is in fact false, then the researcher did:

- a. The wrong thing; type I error
- b. The wrong thing; type alpha error.
- c. The wrong thing; type I error.
- d. The wrong thing; standard error.
- e. The right thing.

Answer: a

The men's Body Mass Index (BMI) in Jordan is normally distributed with a mean of 22.8 and a standard deviation of 4. If a man is considered overweight if his BMI is between 25 - 30, what is the probability of randomly picking an overweight Jordanian man?

Use the section of Z-Table below.

$$[Z = (x - \mu) / \sigma]$$

z	.00	.01	.02	.03	.04	.05	.06	.07	.08
0.0	.5000	.5040	.5080	.5120	.5160	.5199	.5239	.5279	.5319
0.1	.5398	.5438	.5478	.5517	.5557	.5596	.5636	.5675	.5714
0.2	.5793	.5832	.5871	.5910	.5948	.5987	.6026	.6064	.6103
0.3	.6179	.6217	.6255	.6293	.6331	.6368	.6406	.6443	.6480
0.4	.6554	.6591	.6628	.6664	.6700	.6736	.6772	.6808	.6844
0.5	.6915	.6950	.6985	.7019	.7054	.7088	.7123	.7157	.7190
0.6	.7257	.7291	.7324	.7357	.7389	.7422	.7454	.7486	.7517
0.7	.7580	.7611	.7642	.7673	.7704	.7734	.7764	.7794	.7823
0.8	.7881	.7910	.7939	.7967	.7995	.8023	.8051	.8078	.8106
0.9	.8159	.8186	.8212	.8238	.8264	.8289	.8315	.8340	.8365
1.0	.8413	.8438	.8461	.8485	.8508	.8531	.8554	.8577	.8599
1.1	.8643	.8665	.8686	.8708	.8729	.8749	.8770	.8790	.8810
1.2	.8849	.8869	.8888	.8907	.8925	.8944	.8962	.8980	.8997
1.3	.9032	.9049	.9066	.9082	.9099	.9115	.9131	.9147	.9162
1.4	.9192	.9207	.9222	.9236	.9251	.9265	.9279	.9292	.9306
1.5	.9332	.9345	.9357	.9370	.9382	.9394	.9406	.9418	.9429
1.6	.9452	.9463	.9474	.9484	.9495	.9505	.9515	.9525	.9535
1.7	.9554	.9564	.9573	.9582	.9591	.9599	.9608	.9616	.9625
1.8	.9641	.9649	.9656	.9664	.9671	.9678	.9686	.9693	.9699
1.9	.9713	.9719	.9726	.9732	.9738	.9744	.9750	.9756	.9761
2.0	.9772	.9778	.9783	.9788	.9793	.9798	.9803	.9808	.9812

- a. 25.53%
- b. 2.553%
- c. .2553%
- d. 56.89%
- e. 5.689%

Answer: a

Which of the following statements is correct regarding variance?

- a. It is one of the measures of location.
- b. It is used in the calculation of standard error in some inferential statistical tests.
- c. It is the square root of standard deviation.
- d. It appears in the 5-number summary.
- e. It is easily influenced by extreme values.


Answer: e

British investigators conducted a study to compare history of childhood immunization among 2,013 children with attention deficit hyperactivity disorder (ADHS) and 4,209 children without such disorders (They found no association.)

This is an example of which type of study?

- a. Descriptive
- b. Clinical trial
- c. Case-control
- d. Cohort
- e. Experimental

Answer: c



A researcher provided her sample results regarding family monthly income in the form of a 5-number summary as follows: [JD 275, JD 375, JD 475, JD 675, JD 1225]. The results

of this sample can be described as?

- a. Standardized
- b. Symmetric
- C. Normally distributed
- d. Skewed to the left.
- e. Skewed to the right.

Answer: e

A study in which children are randomly assigned to receive either a newly manufactured fissure sealant or currently available fissure sealant, and are followed to monitor for occurrence of caries. This is an example of which type of study?

- A. Experimental
- B. Cohort
- C. Observational
- D. None of them
- E. Case-control

Answer A



