

Task 3: What is the level of measurement of the following variables?

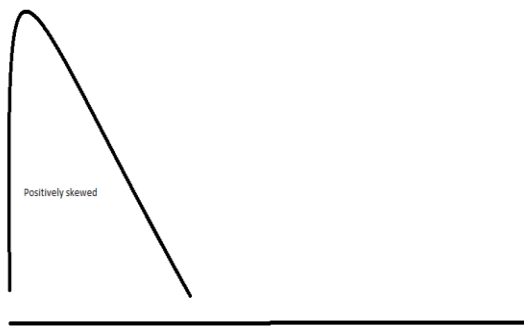
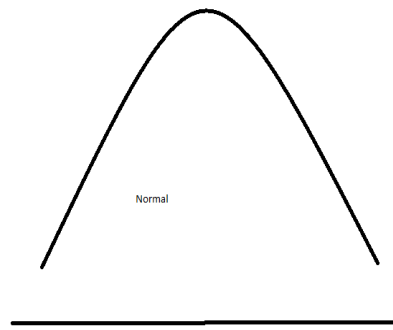
- a) The number of downloads of different bands' songs on iTunes. **Interval**
- b) The names of the bands that were downloaded. **Nominal**
- c) The position in the iTunes download chart. **Ordinal**
- d) The money earned by the bands from the downloads. **Ratio**
- e) The weight of drugs bought by the bands with their royalties. **Ratio**
- f) The type of drugs bought by the bands with their royalties. **Nominal**
- g) The phone numbers that the bands obtained because of their fame. **Nominal**
- h) The gender of the people giving the bands their phone numbers. **Binary**
- i) The instruments played by the band members. **Nominal**
- j) The time they had spent learning to play their instruments. **Ratio**

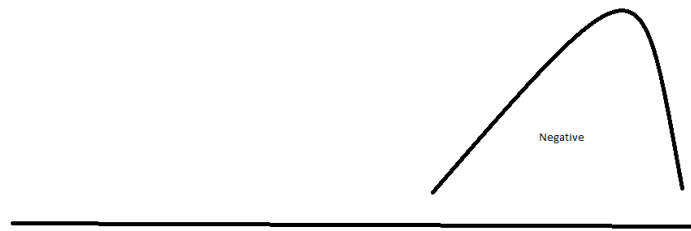
Task 4: Say I own 857 CDs. My friend has written a computer program that uses a webcam to scan the shelves in my house where I keep my CDs and measure how many I have. His program says that I have 863 CDs. Define measurement error. What is the measurement error in my friend's CD-counting device?

"Measurement error is the discrepancy between the numbers used to represent the thing we're measuring and the actual value of the thing we're measuring (Field)". The measurement error is 6 CDs.

Task 5: Sketch the shape of a normal distribution, a positively skewed distribution and a negatively skewed distribution.

See Below





Field, Andy; Miles, Jeremy; Field, Zoe. Discovering Statistics Using R (p. 31). SAGE Publications. Kindle Edition.

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