Giving that mean=34, median= 32 and standard deviation as 12. Calculate the Pearson's coefficient of skewness. a. 0.1 b. 0.4 c. 0.5 d. 1.6

Solution

Skewness is a measure of the asymmetry of the probability distribution. Skewness value can be positive or negative.

Pearson coefficient of skewness is based on arithmetic mean, mode, median and standard deviation.

Pearson's median or second skewness coefficient:

$$S = \frac{3(mean - median)}{standard\ deviation}.$$

So in our case

$$S = \frac{3*(34-32)}{12} = \frac{6}{12} = 0.5.$$

Answer: c. 0.5.