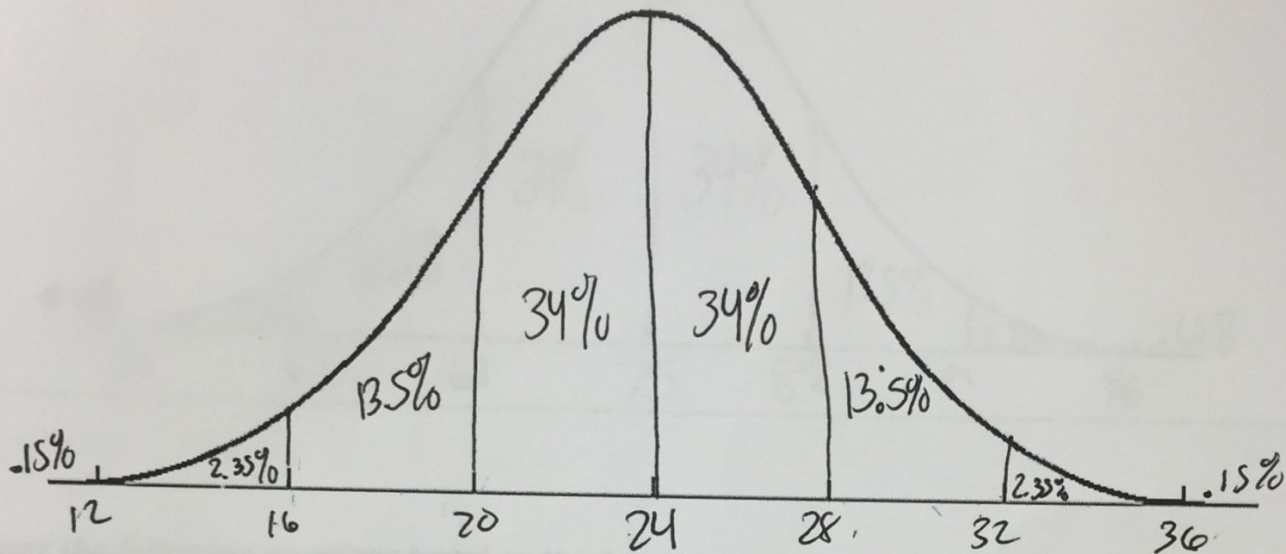


100 juniors at Central High School took the ACT last year. The scores were distributed normally with a mean of 24 and a standard deviation of 4. Label the mean and three standard deviations from the mean.



Answer the following questions based on the data:

a) What percentage of scores are between scores 20 and 28?

68%

b) What percentage of scores are between scores 16 and 32?

95%

c) What percentage of scores are between scores 16 and 28?

81.5%

d) What percentage of scores is less than a score of 12?

.15%

e) What percentage of scores is greater than a score of 24?

50%

f) Approximately how many juniors scored between 24 and 28?

170

g) Approximately how many juniors scored between 20 and 28?

340

h) Approximately how many juniors scored between 24 and 32?

237.5

i) Approximately how many juniors scored between 16 and 20?

67.5

j) Approximately how many juniors scored higher than 32?

12.5

$$Q1: \frac{24 - (.67)(4)}{.67} = 21.32$$

$$Q3: \frac{24 + (.67)(4)}{.67} = 26.68$$