MARKS

10

(3, 4, 3)

7. The Chapin Social Insight Test is designed to evaluate how accurately the person doing the Test appraises other people. In the reference population used to develop the Test, suppose that Test scores can be modelled by a normal distribution with a mean of 25 and a standard deviation of 5; the range of possible scores is 0-41.

   (a) Find the proportion of the reference population with Test scores of 20 and greater.

   (b) Find the proportion of the reference population with Test scores between 10 and 20. Explain briefly if it matters whether the end points (10 and 20) of this interval are *in*cluded or *ex*cluded from the probability calculation.

   (c) How high a Test score must be obtained to be in the top quarter of the reference population in social insight?

(a)

(a)

Proportion

(b)

(b)

Proportion

(c)

(c)

Score