S.ID.B.5: Frequency Tables 1

1 The test scores for 10 students in Ms. Sampson's homeroom were 61, 67, 81, 83, 87, 88, 89, 90, 98, and 100. Which frequency table is accurate for this set of data?

1)

Interval	Frequency
61–70	2
71–80	2
81–90	7
91–100	10

2)

Interval	Frequency
61–70	2
71–80	2
81–90	8
91–100	10

3)

Interval	Frequency
61–70	2
71–80	0
81–90	8
91–100	10

4)

Interval	Frequency
61–70	2
71–80	0
81–90	6
91–100	2

2 The table below shows a cumulative frequency distribution of runners' ages.

Cumulative Frequency Distribution of Runners' Ages

Age Group	Total
20–29	8
20–39	18
20–49	25
20–59	31
20–69	35

According to the table, how many runners are in their forties?

1) 25
2) 10
3) 7
4) 6

3 The cumulative frequency table below shows the length of time that 30 students spent text messaging on a weekend.

Minutes Used	Cumulative Frequency
31–40	2
31–50	5
31–60	10
31–70	19
31–80	30

Which 10-minute interval contains the first quartile?

1) 31 – 40
2) 41 – 50
3) 51 – 60
4) 61 – 70

4 The cumulative frequency table below shows the number of minutes 31 students spent text messaging on a weekend.

Text-Use Interval (minutes)	Cumulative Frequency
41–50	2
41–60	5
41–70	10
41–80	19
41–90	31

Determine which 10-minute interval contains the median. Justify your choice.

S.ID.B.5: Frequency Tables 1
Answer Section

1 ANS: 4 REF: 060401a

2 ANS: 3
$25 - 18 = 7$

REF: 060822ia

3 ANS: 3 REF: 061230ia

4 ANS:
If there are 31 students. the 16th student's time represents the median. The 16th time is in the 41-80 interval on the cumulative frequency table and the 71-80 interval on the related frequency table.

REF: 011432ia