

NAME

QUARTER

GRADE & SECTION

DATE

Activity: Quartile of Grouped Data

Use the given grouped data to find the indicated quartile

1) Calculate the Q3 of the scores of 20 students.

Complete the table with
Lower Boundaries (LB) and
Cumulative Frequency (cf)

Scores	Frequency f	Lower Boundaries (LB)	Cumulative Frequency (cf)
41 – 50	2		
31 – 40	5		
21 – 30	2		
11 – 20	7		
1 – 10	4		
N			

$i =$

Compute the Q_{kth}
class

$$\frac{kN}{4} = \frac{\quad}{\quad} \cdot \frac{\quad}{\quad}$$

$$= \frac{\quad}{\quad}$$

Find the class
interval of Q_k

The Q3 class is
class interval

-

Lower
Boundary of
the Q_k class

$LB =$

frequency of
the Q_k class

$f_{Q_k} =$

cumulative
frequency of the
class before the Q_k
class

$cf_b =$

Find the value of Q_k

$$Q_k = LB + \left(\frac{\frac{kN}{4} - cf_b}{f_{Q_k}} \right) i$$

$Q_3 =$

Interpretation

Therefore, % of the students have a score .

2) Calculate the Q1 of the height of 40 junior high school students.

Complete the table with Lower Boundaries (LB) and Cumulative Frequency (cf)

Height in cm	Frequency f	Lower Boundaries (LB)	Cumulative Frequency (cf)
166 – 170	3		
161 – 165	8		
156 – 160	9		
151 – 155	11		
146 – 150	3		
141 – 145	6		
N			

$i =$

Compute the Q_{kth} class

$$\frac{kN}{4} = \frac{\quad}{\quad}$$

$$= \quad$$

Find the class interval of Q_k

The Q_1 class is class interval -

Lower Boundary of the Q_k class

$LB =$

frequency of the Q_k class

$f_{Q_k} =$

cumulative frequency of the class before the Q_k class

$cf_b =$

Find the value of Q_k

$$Q_k = LB + \left(\frac{\frac{kN}{4} - cf_b}{f_{Q_k}} \right) i$$

$Q_1 =$

Round off to two decimal places.

Interpretation

Therefore, % of the students has a height of cm.

How many attempts? ____.
How well did you do?



Need help!



Just OK!



Splendid

I FEEL THAT...