

NAME _____

QUARTER _____

GRADE & SECTION _____

DATE _____

Activity: Decile of Grouped Data

Use the given grouped data to find the indicated decile.

1) Calculate the D8 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			

Compute the D_{kth} class

$$\frac{kN}{10} = \boxed{\quad} \cdot \boxed{\quad}$$

$$= \boxed{\quad}$$

Find the class interval of D_k

The D8 class is class interval $\boxed{\quad} - \boxed{\quad}$

Lower Boundary of the D_k class

$$LB = \boxed{\quad}$$

frequency of the D_k class

$$f_{D_k} = \boxed{\quad}$$

cumulative frequency of the class before the D_k class

$$cf_b = \boxed{\quad}$$

Find the value of D_k

$$D_k = LB + \left(\frac{\frac{kN}{10} - cf_b}{f_{D_k}} \right) i$$

$$D_8 = \boxed{\quad}$$

Interpretation

Therefore, $\boxed{\quad}$ % of the students have a score $\boxed{\quad} - \boxed{\quad}$

2) Calculate the D6 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			

Compute the D_{kth} class

$$\frac{kN}{10} = \frac{\square \cdot \square}{10} = \square$$

Find the class interval of D_k

The D_6 class is class interval $\square - \square$

Lower Boundary of the D_k class

frequency of the D_k class

cumulative frequency of the class before the D_k class

$LB = \square$

$f_{Dk} = \square$

$cf_b = \square$

Find the value of D_k

$$D_k = LB + \left(\frac{\frac{kN}{10} - cf_b}{f_{Dk}} \right) i$$

$$D_6 = \square$$

Round off to two decimal places.

Interpretation

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

How many attempts? $\underline{\hspace{2cm}}$.
How well did you do?



\square
Need help!



\square
Just OK!



\square
Splendid

I HAVE TO...

$\underline{\hspace{10cm}}$