

NAME _____

QUARTER _____

GRADE & SECTION _____

DATE _____

Activity: Percentile of Grouped Data

Use the given grouped data to find the indicated decile.

1) Calculate the P35 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 P_{kth} class

$$\frac{kN}{100} = \boxed{\quad} \cdot \boxed{\quad}$$

$$= \boxed{\quad}$$

Find the class interval of P_k

The P35 class is class interval $\boxed{\quad} - \boxed{\quad}$

Lower Boundary of the P_k class

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

frequency of the P_k class

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

cumulative frequency of the class before the P_k class

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

Find the value of P_k

$$P_k = LB + \left(\frac{\frac{kN}{100} - cf_b}{f_{Pk}} \right) i$$

$$P_{35} = \boxed{\quad}$$

Round off to two decimal places.

Interpretation

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

2) Calculate the P85 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 P_{kth} class

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

$$= \boxed{\quad}$$

Find the class interval of P_k

The P6 class is class interval $\boxed{\quad} - \boxed{\quad}$

Lower Boundary of the P_k class

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

frequency of the P_k class

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

cumulative frequency of the class before the P_k class

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

Find the value of P_k

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

$$P_{85} = \boxed{\quad}$$

Round off to two decimal places.

Interpretation

Therefore, $\boxed{\quad}$ % of the students has a height of $\boxed{\quad}$ cm.

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

I KNOW THAT...



Need help!



Just OK!



Splendid