Bellwork   Alg 2B   Thur, April 26, 2018

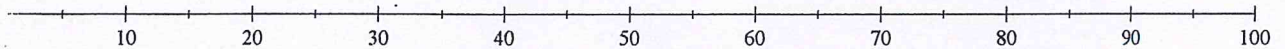Below is the data for two classes.

Class A:

Hwk % completion: $X_{min} = 17.6$ $Q1 = 52.9$ $Med = 69.1$ $Q3 = 89.7$ $X_{max} = 100$

Class B:

Hwk % completion: $X_{min} = 35.3$ $Q1 = 67.6$ $Med = 82.4$ $Q3 = 100$ $X_{max} = 100$

Using the number line below make a box-and-whisker plot for the hwk % completion for each class. Put Class A above the number line and Class B below. Then answer the questions using the plot.

Class A:

Class B:

1. If you completed about 68% of your homework:
a. In Class A about what % of the class did completed more homework than you?

b. In Class B about what % of the class did completed more homework than you?

2. If you completed about 85% of your homework:
a. In Class A about what % of the class did completed less homework than you?

b. In Class B about what % of the class did completed less homework than you?

3. Which class did more hwk? Give a reason.

Use this set of data for 4 to 7:
28, 29, 29, 31, 32, 32, 34, 35, 36, 38, 40, 43, 43, 44, 47, 48, 50, 51, 55, 59
4. What percentile is 43 at?

5. What number is at the 90th percentile?

6. What number is at the 35th percentile?

7. What percentile is 28 at?

Bellwork   Alg 2B   Thur, April 26, 2018

ANSWERS

Below is the data for two classes.

Class A:
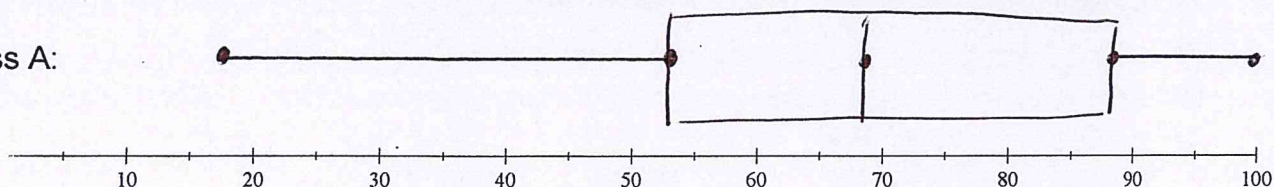
Hwk % completion: $X_{min} = 17.6$ $Q1 = 52.9$ $Med = 69.1$ $Q3 = 89.7$ $X_{max} = 100$

Class B:

Hwk % completion: $X_{min} = 35.3$ $Q1 = 67.6$ $Med = 82.4$ $Q3 = 100$ $X_{max} = 100$

Using the number line below make a box-and-whisker plot for the hwk % completion for each class. Put Class A above the number line and Class B below. Then answer the questions using the plot.

Class A:

Class B:

1. If you completed about 68% of your homework:
a. In Class A about what % of the class did completed more homework than you? $\approx 50\%$

b. In Class B about what % of the class did completed more homework than you? $\approx 75\%$

2. If you completed about 85% of your homework:
a. In Class A about what % of the class did completed less homework than you?   Between 50% & 75%

b. In Class B about what % of the class did completed less homework than you? $\approx 50\%$ Between 50% & 75

3. Which class did more hwk? Give a reason. EXAMPLE answer is given:
Class B did more hwk because about 75% of the class completed about 68% of their hwk when only about 50% of Class A completed that much hwk.

Use this set of data for 4 to 7:
28, 29, 29, 31, 32, 32, 34, 35, 36, 38, 40, 43, 43, 44, 47, 48, 50, 51, 55, 59   20 #'s

4. What percentile is 43 at? $\frac{11}{20}$ ⇒ **55th percentile**

5. What number is at the 90th percentile?
$(.90)(20) = 18$ **55** (it has 18 of 20 #'s below it)

6. What number is at the 35th percentile?
$(.35)(20) = 7$ **35** (it has 7 of 20 #'s below it)

7. What percentile is 28 at?
$\frac{0}{20}$ ⇒ **0th percentile**

1