Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Class:\_\_\_\_\_\_\_\_\_\_\_ Date:\_\_\_\_\_\_\_\_\_\_\_

**Statistics - Interquartile Range (IQR) – Homework**

**For Exercises 1-2, identify the range, median, Q1, Q3, and interquartile range (IQR).**

**1.** Ages of mall shoppers

 13 33 21 18 17 72 17 55

 31 27 47 29 19 18 25

**2.** Class grades on a history exam

 97 86 93 76 70 85 82 83 99 100 96

**3.** Emily works at a fitness center. She recorded the heart rates of some people immediately after they exercised. Her data are shown below.

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 **a.** What is the range of the middle 50% of the data Emily collected?

Emily measured the heart rates of two more people. When these heart rates were added to the data set, the range increased.

 **b.** Explain what must be true of the two additional heart rates in order for the range to increase.