## P    Chapter 2 Project

### Fast Food Comparison

For three fast-food restaurants, a random sample of service times (in seconds) was taken. The results are to the right.

1. For each restaurant's service times, do the following.

   a. Create a frequency distribution with the given classes. Include the frequency, class boundaries, relative frequency, and cumulative frequency of each class.

   | Class |
   |-------|
   | 30–49 |
   | 50–69 |
   | 70–89 |
   | 90–109 |
   | 110–129 |

   b. Use the frequency distribution to construct a histogram of the data.

2. Based on the graphical descriptions of the data you created in part 1, which fast-food restaurant do you believe consistently has the shortest service times? Explain why.

| Service Times (in Seconds) | | |
|---|---|---|
| Kim's Kajun Kitchen | Chez Carolyn | Emily's Eatery |
| 111 | 109 | 99 |
| 94 | 84 | 63 |
| 57 | 93 | 53 |
| 80 | 123 | 82 |
| 78 | 97 | 75 |
| 109 | 56 | 112 |
| 92 | 79 | 65 |
| 34 | 57 | 55 |
| 67 | 32 | 65 |
| 122 | 68 | 86 |
| 95 | 45 | 94 |
| 46 | 99 | 87 |
| 103 | 82 | 62 |
| 110 | 76 | 68 |
| 93 | 54 | 61 |
| 86 | 84 | 49 |
| 75 | 86 | 37 |
| 49 | 73 | 46 |
| 61 | 79 | 65 |
| 82 | 67 | 86 |
| 76 | 96 | 48 |
| 92 | 112 | 95 |
| 65 | 94 | 33 |
| 92 | 82 | 49 |
| 94 | 96 | 76 |
| 106 | 125 | 35 |
| 112 | 98 | 68 |
| 83 | 120 | 57 |
| 72 | 78 | 41 |
| 119 | 63 | 49 |

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