

# Planting trees

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This task is about constructing and reading information from a back-to-back stem-and-leaf graph.

The kaitiaki of Kaituna Reserve planted akeake and kōhūhū trees. After 3 years they were finding out whether the akeake were taller than the kōhūhū.

They chose 30 akeake and 30 kōhūhū at random. Here are their results.

| Akeake (height in cm) |     |     |     |     | Kōhūhū (height in cm) |     |     |     |     |
|-----------------------|-----|-----|-----|-----|-----------------------|-----|-----|-----|-----|
| 146                   | 160 | 166 | 171 | 175 | 143                   | 153 | 159 | 162 | 169 |
| 149                   | 160 | 167 | 171 | 178 | 147                   | 154 | 160 | 165 | 170 |
| 151                   | 162 | 167 | 171 | 179 | 149                   | 156 | 161 | 166 | 171 |
| 153                   | 163 | 168 | 173 | 181 | 151                   | 157 | 161 | 166 | 173 |
| 155                   | 165 | 170 | 173 | 184 | 152                   | 157 | 162 | 167 | 176 |
| 157                   | 165 | 170 | 174 | 185 | 153                   | 158 | 162 | 169 | 178 |

- a) Draw a back-to-back stem-and-leaf graph for this data.  
The graph has been started for you.

**Akeake**

**Height (cm)**

**Kōhūhū**

13  
14  
15  
16  
17  
18  
19

- b) What is the most common range of heights for the kōhūhū?

- (A) 140-149 cm
- (B) 150-159 cm
- (C) 160-169 cm
- (D) 170-179 cm

- c) Make a statement which compares the heights of the akeake with the kōhūhū.

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