Example 1. Determine whether each collection is a set.

(a) the collection of the distinct letters of 'happy'

The distinct letters of 'happy' are h, a, p, y. There is no ambiguity. Thus, this collection is a set.

(b) the collection of natural numbers between 3 and 7.

The natural numbers between 3 and 7 are $4, 5, 6$. There is no ambiguity. Thus, this collection is a set.

(c) the collection of good-looking actors who won the Academy Awards for Best Supporting Actor from 2020 to 2024.

Here, the definition of 'good-looking' varies based on individual opinions. Thus, this collection is not a set.

(d) the collection of actors who won the Academy Awards for Best Supporting Actor from 2020 to 2024.

The actors who won the Academy Awards for Best Supporting Actor from 2020 to 2024 are

Brad Pitt, Daniel Kaluuya, Tory Kotsur, Ke Huy Quan, and Robert Downey Jr. There is no ambiguity.

Thus, this collection is a set.