Chain of numbers

This task is about continuing number patterns and finding a rule.

A chain of numbers begins: 1 → 3
This could be continued several ways.

1 → 3 → 5 → 7 → 9

a) What is the rule for continuing this chain? _____

1 → 3 → 9 → 27 → 81

b) What is the rule for continuing this chain? _____

1 → 3 → 7 → 15 → 31 → 63

c) What is the rule for continuing this chain? _____

Make up a different chain by writing down the next three numbers.
The chain starts with: 1 → 3 and keeps getting bigger.

d) i)

1 → 3 → ☐ → ☐ → ☐

Write the rule for the chain you have written.

ii) _____

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