



**2.3. Pattern Discovery Basic Concepts:
Compressed Representation: Closed Patterns
and Max-Patterns**

In-Lecture Question

Question

Which of the frequent patterns in the table is closed pattern but not a max pattern? Check all that apply.

- ☐ {Beer, Nuts, Diaper}
- ☐ {Beer, Coffee, Diaper, Nuts}
- ☐ {Beer, Diaper, Eggs}
- ☐ {Beer, Nuts, Eggs, Milk}
- ☐ {Beer, Nuts, Diaper, Eggs, Milk}

Frequent Pattern	Support
Beer, Nuts, Diaper	10
Beer, Coffee, Diaper, Nuts	20
Beer, Diaper, Eggs	30
Beer, Nuts, Eggs, Milk	40
Beer, Nuts, Diaper, Eggs, Milk	30

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Answers: {Beer, Nuts, Diaper} and {Beer, Nuts, Eggs, Milk}

Explanation: {Beer, Coffee, Diaper, Nuts} and {Beer, Nuts, Diaper, Eggs, Milk} are max patterns since there are not any frequent super patterns of either. {Beer, Diaper, Eggs} has a super pattern with the same support, hence it is not a closed pattern.