



# Prep 11 - Part 1 of 1

## Chase test 1



Suppose we have a relation on attributes ABCDEFG with these functional dependencies:

B → CD,  
C → AG,  
CE → F,  
CF → B.

Which of the following decompositions are lossless? Check all that apply.

- ☐ ABC, CDE, EFG
- ☐ ACE, CDEF, BFG
- ☒ BCE, ACEF, BDG
- ☐ ABCD, DEFG
- ☒ ABC, BD, CEF, CEG

History

Submit

✓ Your solution is complete.

Submitted after the deadline!

## Keys 1



Suppose we have a relation on attributes ABCDEFG with these functional dependencies:

B → CD,  
C → AG,  
CE → F,  
CF → B.



Which of the following are true? Check all that apply.

- ☐ A is in every key.
- ☐ C is in no key.
- ☒ E is in every key.
- ☐ G is in every key.
- ☒ D is in no key.

History

Submit

✓ Your solution is complete.

Submitted after the deadline!

## ER 1



Refer to the ER diagram on slide 17 from the slides posted on the course website [here](#).

Which of the following situations are permitted by this ER model?  
Check all that apply.

- ☐ A person can have residences in any number of cities.
- ☒ A city might have no people who reside there.
- ☐ A tourist may have no reservations at all.
- ☐ A voyage must must have at least one tourist with a reservation for it.
- ☒ The sale relationship is optional for an order.

History

Submit

✓ Your solution is complete.

Submitted after the deadline!

## ER 2



Refer to the ER diagram on slide 17 from the slides posted on the course website [here](#).

Which of the following situations are permitted by this ER model?  
Check all that apply.

- ☒ There can be the same number of orders as invoices.
- ☐ There can be more invoices than orders.
- ☒ There can be more orders than invoices.
- ☐ Residence is a one-to-one relationship.
- ☒ Reservation is a many-to-many relationship.

History

Submit

✓ Your solution is complete.

Submitted after the deadline!