Name 1: **Date:**
Name 2:

Let relation R = (A, B, C, D) with the following FDs:

A->BC
BC->A
B->D

1. Is A a candidate key of the relation?

Compute $\{A\}^+$

$\{A\}^+ = \{A, B, C, D\}$ contains all R $\Rightarrow$ A is a candidate key.

2. Find one candidate key of this relation

The best alg. to find the keys of a relation is:

compute closure of every combination of attributes. We already know A is a key, so try all other combinations:

B C D	BCDA } Superkeys
B C	BCDA
B D	BD
B	BD
C D	CD
C	C
D	D

But BC is minimal so BC and A are candidate keys.