

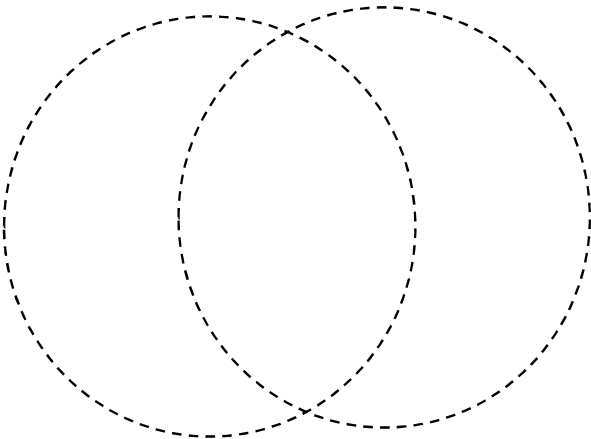
GROUP 1: INNER JOIN ANSWER KEY

STEP 1

Table A:  
ORDERS

TABLE B:  
CUSTOMERS

Make a  
joined table  
of order\_id,  
cust\_id, and  
state



	ORDER_ID	CUST_ID	STATE
1	12345	567	WA
2	12346	457	MI
3	15678	234	(null)
4			
5			
6			
7			

STEP 2

Make a table of  
the count of  
orders and  
customers in  
each state.  
Don't count  
NULL  
customer\_id or  
order\_id

ORDER COUNT	CUSTOMER COUNT	STATE
1	1	WA
1	1	MI
1	1	(null)

STEP 3

Tell us the total  
count of orders  
and customers  
overall.

ORDER COUNT	CUSTOMER COUNT
3	3

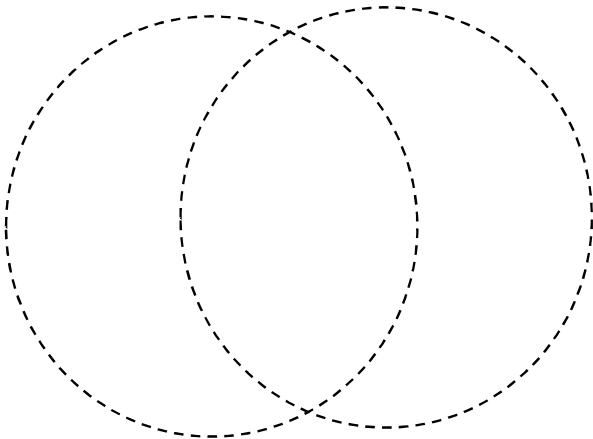
GROUP 2: LEFT JOIN ANSWER KEY

STEP 1

Table A:  
ORDERS

TABLE B:  
CUSTOMERS

Make a  
joined table  
of order\_id,  
cust\_id, and  
state



	ORDER_ID	CUST_ID	STATE
1	12345	567	WA
2	12346	457	MI
3	12366	123	(null)
4	14567	(null)	(null)
5	19453	(null)	(null)
6	15678	234	(null)
7			

STEP 2

Make a table of  
the count of  
orders and  
customers in  
each state.  
Don't count  
NULL  
customer\_id or  
order\_id

ORDER COUNT	CUSTOMER COUNT	STATE
1	1	WA
1	1	MI
4	2	(null)

STEP 3

Tell us the total  
count of orders  
and customers  
overall.

ORDER COUNT	CUSTOMER COUNT
6	4

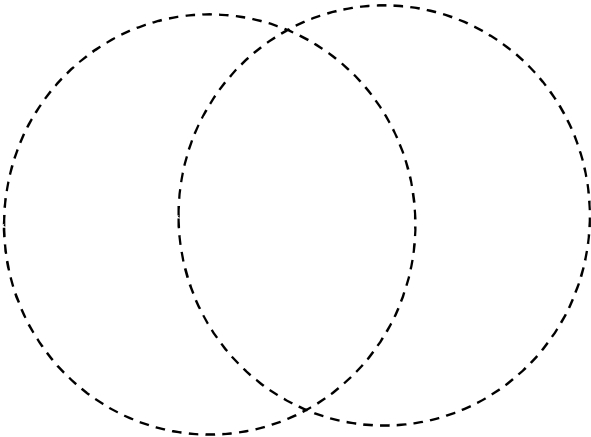
GROUP 3: FULL OUTER JOIN ANSWER KEY

STEP 1

Table A:  
ORDERS

TABLE B:  
CUSTOMERS

Make a  
joined table  
of order\_id,  
cust\_id, and  
state



	ORDER_ID	CUST_ID	STATE
1	12345	567	WA
2	12346	457	MI
3	12366	123	(null)
4	14567	(null)	(null)
5	19453	(null)	(null)
6	15678	234	(null)
7	(null)	678	(null)
8	(null)	367	SD
9			

STEP 2

Make a table of  
the count of  
orders and  
customers in  
each state.  
Don't count  
NULL  
customer\_id or  
order\_id

ORDER COUNT	CUSTOMER COUNT	STATE
1	1	WA
1	1	MI
0	1	SD
4	3	(null)

STEP 3

Tell us the total  
count of orders  
and customers  
overall.

ORDER COUNT	CUSTOMER COUNT
6	6

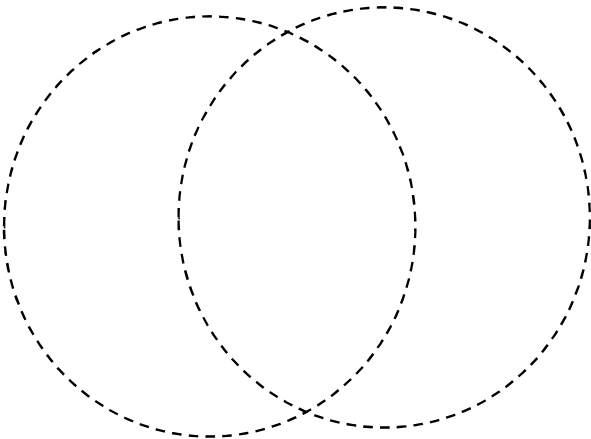
GROUP 4: LEFT JOIN WHERE B IS NULL ANSWER KEY

STEP 1

Table A:  
ORDERS

TABLE B:  
CUSTOMERS

Make a  
joined table  
of order\_id,  
cust\_id, and  
state



	ORDER_ID	CUST_ID	STATE
1	14567	(null)	(null)
2	19453	(null)	(null)
3	12366	123	(null)
4			
5			
6			
7			
8			
9			

STEP 2

Make a table of  
the count of  
orders and  
customers in  
each state.  
Don't count  
NULL  
customer\_id or  
order\_id

ORDER COUNT	CUSTOMER COUNT	STATE
3	1	(null)

STEP 3

Tell us the total  
count of orders  
and customers  
overall.

ORDER COUNT	CUSTOMER COUNT
3	1

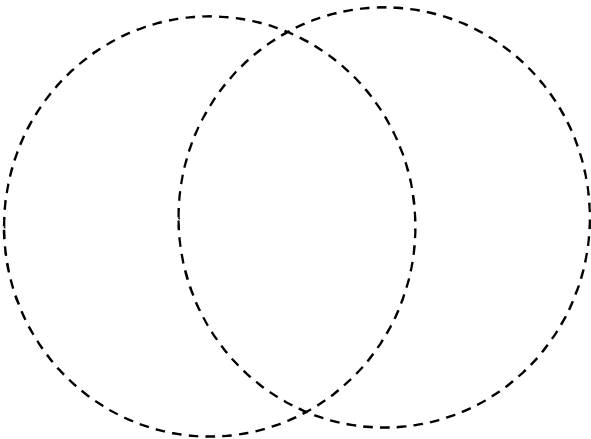
GROUP 5: FULL OUTER JOIN WHERE A AND B NULL

STEP 1

Table A:  
ORDERS

TABLE B:  
CUSTOMERS

Make a  
joined table  
of order\_id,  
cust\_id, and  
state



	ORDER_ID	CUST_ID	STATE
1	12366	123	(null)
2	14567	(null)	(null)
3	14453	(null)	(null)
4	(null)	678	DE
5	(null)	367	SD
6			
7			
8			
9			

STEP 2

Make a table of  
the count of  
orders and  
customers in  
each state.  
Don't count  
NULL  
customer\_id or  
order\_id

ORDER COUNT	CUSTOMER COUNT	STATE
3	1	(null)
0	1	DE
0	1	SD

STEP 3

Tell us the total  
count of orders  
and customers  
overall.

ORDER COUNT	CUSTOMER COUNT
3	3