

HINTS

#1 inner query: **SELECT DISTINCT vendor_id FROM invoices**

#2 almost the same as the query on slide #3

#3 inner query: **SELECT * FROM invoice_line_items WHERE account_number = gl.account_number**
Use NOT EXISTS

#4 inner query: **SELECT DISTINCT invoice_id FROM invoice_line_items WHERE invoice_sequence > 1**
Need to join three tables

#5 subquery is used in FROM clause

Subquery is aggregate query uses **MAX(invoice_total) AS invoice_max** also uses **WHERE invoice_total – credit_total – payment_total > 0** also uses **GROUP BY vendor_id**

Inner query provides a result set with the MAX unpaid invoice from each vendor. Create an outer query that finds the SUM of all the largest unpaid invoices from each vendor.

#6 Subquery is: **SELECT CONCAT(vendor_state, vendor_city) as vendor_city_state**
FROM vendors
GROUP BY vendor_city_state
HAVING COUNT(*) > 1

Outer query uses **WHERE CONCAT(vendor_state, vendor_city) NOT IN**

#7 inner query: **SELECT MIN(invoice_date) FROM invoices WHERE vendor_id = i.vendor_id**
This is a correlated query. Join vendors and invoice in outer query.