Exercise 1(a):

SELECT COUNT(DISTINCT a.sku)

FROM skuinfo a JOIN skstinfo b

ON a.sku = b.sku;

SELECT COUNT(DISTINCT a.sku)

FROM skuinfo a JOIN trnsact b

ON a.sku = b.sku;

SELECT COUNT(DISTINCT s.sku)

FROM skstinfo s JOIN trnsact b

ON s.sku = b.sku;

(b) SELECT sku, store, COUNT(sku)

FROM skstinfo

GROUP BY sku, store;

SELECT sku, store, COUNT(sku)

FROM trnsact

GROUP BY sku, store;

Exercise 2(a) SELECT COUNT(DISTINCT store)

FROM strinfo;

SELECT COUNT(DISTINCT store)

FROM store\_msa;

SELECT COUNT(DISTINCT store)

FROM skstinfo;

SELECT COUNT(DISTINCT store)

FROM trnsact;

(b) SELECT a.store, b.store, c.store, d.store

FROM strinfo a

LEFT JOIN skstinfo b ON a.store = b.store

LEFT JOIN trnsact c ON a.store = c.store

LEFT JOIN store\_msa d ON c.store = d.store

Exercise 3

SELECT \*

FROM trnsact t LEFT JOIN skstinfo s

ON t.sku = s.sku AND t.store = s.store

WHERE s.sku IS NULL;

Exercise 4

SELECT SUM(t.amt - t.quantity \* s.cost)/COUNT(DISTINCT t.saledate)AS profit

FROM trnsact t LEFT JOIN skstinfo s

ON t.sku = s.sku AND t.store = s.store

WHERE t.stype = 'P';

Exercise 5

SELECT saledate, stype, SUM(amt)

FROM trnsact

WHERE stype = 'R'

GROUP BY saledate, stype

ORDER BY SUM(amt) DESC;

SELECT saledate, stype, SUM(quantity)

FROM trnsact

WHERE stype = 'R'

GROUP BY saledate, stype

ORDER BY SUM(amt) DESC;

Exercise 6

SELECT MAX(sprice), MIN(sprice)

FROM trnsact;

Exercise 7

SELECT DISTINCT d.dept, d.deptdesc, COUNT(DISTINCT s.brand)

FROM skuinfo s JOIN deptinfo d

ON s.dept = d.dept

HAVING COUNT(DISTINCT s.brand)> 100

GROUP BY d.dept, d.deptdesc;

Exercise 8

SELECT s.sku, d.deptdesc

FROM skstinfo s LEFT JOIN skuinfo u ON s.sku = u.sku

JOIN deptinfo d ON u.dept = d.dept;

Exercise 9

SELECT d.dept, d.deptdesc, s.brand, s.style, s.color, SUM(amt) AS total\_value

FROM skuinfo s JOIN trnsact t ON s.sku = t.sku

JOIN deptinfo d ON d.dept = s.dept

WHERE t.stype = 'R'

GROUP BY d.dept, d.deptdesc, s.brand, s.style, s.color

ORDER BY total\_value DESC;

Exercise 10

SELECT s.state, s.zip, s.city, s.store, SUM(t.amt)

FROM store\_msa s JOIN trnsact t ON s.store = t.store

WHERE t.stype = 'P'

GROUP BY s.state, s.zip, s.city, s.store

ORDER BY SUM(t.amt) DESC;