A)

1)

SELECT nuwagon

FROM wagon

WHERE typewagon='frigo' AND capacite>10 AND nomgare='tours';



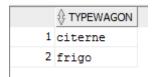
2)

SELECT DISTINCT typewagon

FROM wagon w JOIN train t

ON w.nuwagon=t.nuwagon

WHERE nutrain=4002;



3)

SELECT nuligne

FROM ligne l

WHERE nomgare='tours' AND rang!=1 AND rang!=(

SELECT MAX(rang)

FROM ligne

WHERE nuligne=I.nuligne);



4)

SELECT nutrain

FROM trafic t JOIN reseau r

ON t.nuligne=r.nuligne

WHERE nomgareorigine='angers' AND nomgaredest='beziers' AND nujour='12/03/13';

	∯ NUTRAIN
1	4002
2	4051

5)

SELECT nuwagon

FROM trafic t JOIN reseau r ON t.nuligne=r.nuligne JOIN train tr ON tr.nutrain=t.nutrain

WHERE nomgareorigine='angers' AND nomgaredest='beziers' AND nujour='12/03/13';

	NUWAGON	
1	1104	
2	1105	
3	1106	
4	1004	
5	2019	

6)

SELECT nuligne

FROM trafic

GROUP BY nuligne

HAVING COUNT(nuligne)=(

SELECT COUNT(DISTINCT nujour)

FROM trafic);



```
7)
SELECT nomgare
FROM ligne
WHERE nuligne=10 AND rang=(
  SELECT MAX(rang)
  FROM ligne
  WHERE nuligne=10);

⊕ NOMGARE

     1 tours
8)
SELECT SUM(capacite)
FROM (
  SELECT capacite
  FROM wagon w JOIN train t
  ON w.nuwagon=t.nuwagon
  WHERE etat='charge' AND nutrain=4002);
       $ SUM(CAPACITE)
      1
```

9)

SELECT DISTINCT nomgarearrivee

FROM reseau

CONNECT BY PRIOR nomgarearrivee=nomgareorigine

START WITH nomgareorigine='angers';



10)

SELECT DISTINCT nutrain, COUNT(nuwagon)

FROM train

GROUP BY nutrain;

1 4002 3 2 4051 2		♦ NU	⊕ COUNT(NUWAGON)	
2 4051 2	1	4002	3	
	2	4051	2	

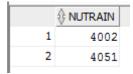
11)

SELECT DISTINCT nutrain

FROM train

GROUP BY nutrain

HAVING COUNT(nuwagon)>=2;



12)

CREATE VIEW view_train

AS (

SELECT t.nutrain, t.nuwagon, typewagon, capacite

FROM wagon w JOIN train t

ON w.nuwagon=t.nuwagon);

	∯ NUTRAIN	♦ NUWAGON		
1	4051	1004	frigo	30
2	4002	1104	citerne	15
3	4002	1105	frigo	30
4	4002	1106	frigo	30
5	4051	2019	plat	20

```
B)

1)

SELECT table_name

FROM user_tables;

2)

SELECT owner, table_name

FROM all_tables

3)

SELECT constraint_name,

DECODE(constraint_type,'P','PRIMARY KEY','R','FOREIGN KEY','C','CHECK')

AS constraint_type

FROM user_constraints;
```