1. Given the SAS data set WORK.TRANSACT:

Rep Cost   Ship

----- ------   -----

SMITH 200   50

SMITH 400   20

JONES 100   10

SMITH 600 100

JONES 100   5

The following output is desired:

 Rep

--------   ------

JONES 105

JONES 105

SMITH 105

SMITH 105

SMITH 105

Which of the following SQL statements was most likely used to generate this result?

A.

Select

rep,

min(Cost,Ship)

from WORK.TRANSACT

group by Rep

order by Rep ;

B.

select

rep,

min(Cost,Ship) as Min

from WORK.TRANSACT

summary by Rep

order by Rep ;

C.

select

rep,

 min(Cost+Ship)

from WORK.TRANSACT

order by Rep;

D.

Select

rep,

min(Cost+Ship)

from WORK.TRANSACT

group by Rep

order by Rep ;

2. Given the SAS data set WORK.ONE:

Rep   Cost

--------- ----

SMITH 20

SMITH 40

JONES 10

SMITH 60

JONES 10

The following SAS program is submitted;

proc sql;

select

Rep, sum(Cost) from WORK.ONE

group by Rep

order by Rep ;

quit;

Which result set would be generated?

A. JONES 20

   JONES 20

  SMITH 120

  SMITH 120

  SMITH 120

B. JONES 20

SMITH 120

C. JONES 280

  SMITH 280

D. JONES 140

  JONES140

  SMITH 140

  SMITH 140

  SMITH 140

3. Given the SAS data set WORK.ONE:

Rep   Cost

--------- ------

SMITH   20

SMITH   40

JONES   10

SMITH   60

JONES   10

The following output is desired:

 Rep

 -----   ----

JONES   20

JONES   20

SMITH 120

SMITH 120

SMITH 120

Which of the following SQL statements was most likely used to generate this result?

A. proc sql;

  select

  rep, sum(Cost) from WORK.ONE

  group by Rep

  order by Rep ;

   quit;

B. proc sql;

  select

rep, (select sum(Cost) from one

group by rep)

from one

order by Rep;

quit;

C. proc sql;

   select

   rep, (select sum(Cost) from one as a

   where a.rep=b.rep)

from one as b

order by Rep;

quit;

D proc sql;

  select

  rep, (select sum(Cost) from one as a

  where a.rep=b.rep)

  from one as b

  summary by Rep

  order by Rep;

quit;

4. Given the SAS data sets:

WORK.MATH1A   WORK.MATH1B

Name Fi   Name Fi

------- --   ------ --

Lauren L   Smith M

Patel A   Lauren L

Chang Z   Patel A

Hillier R

The following SAS program is submitted:

```
proc sql;

select * from WORK.MATH1A

[_insert_set_operator_]

select * from WORK.MATH1B ;

quit;
```

The following output is desired:

```
Name     Fi

-------   ----

Lauren    L

Patel     A

Chang     Z

Hillier   R

Smith     M

Lauren    L

Patel     A
```

Which SQL set operator completes the program and generates the desired output?

A.append corr

B. union corr

C. outer union corr

D. intersect corr

5. Given the SAS data sets:

WORK.MATH1A   WORK.MATH1B

Name Fi   Name Fi

------- --   ------ --

Lauren L   Smith M

Patel A   Lauren L

Chang Z   Patel A

Hillier R

The following SAS program is submitted:

proc sql;

select * from WORK.MATH1A

[_insert_set_operator_]

select * from WORK.MATH1B ;

quit;

The following output is desired:

Name   Fi

-------   ---

Chang   Z

Hillier   R

Which SQL set operator completes the program and generates the desired output?

A.except corr

B. union corr

C. outer union corr

D. intersect corr

6. Given the SAS data sets:

WORK.MATH1A   WORK.MATH1B

Name Fi   Name   Fi

```
-------   ---                ------   ---
```

Lauren L   Smith   M

Patel   A   Lauren L

Chang Z   Patel   A

Hillier   R

The following SAS program is submitted:

proc sql;

select * from WORK.MATH1A

[_insert_set_operator_]

select * from WORK.MATH1B ;

quit;

The following output is desired:

Name   Fi

```
-------   ---
```

Lauren L

Patel   A

Which SQL set operator completes the program and generates the desired output?

A.except corr

B. union corr

C. outer union corr

D. intersect corr

7. Given the SAS data sets:

WORK.CLASS1 WORK.CLASS2

Name Course   Name   Class

```
 ------ -----------      -------    -------
```

Lauren MATH1   Smith   MATH2

Patel   MATH1   Farmer MATH2

Chang MATH1   Patel   MATH2

Chang MATH3   Hillier   MATH2

The following SAS program is submitted:

proc sql;

select Name

from WORK.CLASS1

except all

select Name from WORK.CLASS2 ;

quit;

Which result set would be generated?

A. Name

   Chang

   Lauren

B. Name

   Chang

   Chang

   Lauren

C   Name

     Patel

D. Name

Smith

Farmer

Patel

Hillier

8. Given the SAS data set WORK.ONE:

Rep Cost

----- ----

 SMITH 200

SMITH 400

JONES 100

SMITH 600

JONES 100

The following SAS program is submitted:

proc sql;

 select

Rep, avg(Cost) as Average

from WORK.ONE

[either__insert_SQL_where_clause_]

group by Rep

[_or_ _insert_SQL_having_clause_] ;

quit;

The following output is desired:

Rep Average

----- ----------

JONES 100

Which SQL clause completes the program and generates the desired output?

A. where calculated Average > (select avg(Cost) from WORK.ONE)

B. having Average > (select avg(Cost) from WORK.ONE)

C. having avg(Cost) < (select avg(Cost) from WORK.ONE)

D. where avg(Cost) > (select avg(Cost) from WORK.ONE)

9.Given the SAS data sets:

WORK.ONE   WORK.TWO

Year Qtr Budget   Year Qtr Sales

---- ------ ------   ---- ----- -------

2001 3   500   2001 4 300

2001 4   400   2002 1 600

2003 1   350

The following SAS program is submitted:

proc sql;

select

TWO.*, budget

 from

WORK.ONE

[_insert_join_operator_]

WORK.TWO

on ONE.Year=TWO.Year ;

quit;

The following output is desired:

Year Qtr Sales Budget

2001 4   300   500

2001 4   300   400

   .   .   .   350

11

Which join operator completes the program and generates the desired output?

 A. left join

B. right join

C. full join

D. outer join

10. Given the SAS data sets:

Work.One   Work.Two

year sales   year profit

----- -------   ------ -------

2001 800   2001 100

2001 500   2002 200

2003 700

The following SAS program is submitted:

proc sql;

select sum(profit)

from work.one

right join

work.two

on one.year=two.year;

quit;

Which result set would be generated?

A. 100

B. 300

C. 400

D. 500

11. How many columns can an SQL procedure subquery within a WHERE or HAVING clause return to the outer query?

a. 0

b. 1

c. 2

d. the same number of columns that are in the table

12. Which one of the following SAS programs removes the index Jobcode from the table Staff?

A. proc sql;

   drop index jobcode from work.staff;

   quit;

B.proc sql;

   delete index jobcode from work.staff;

    quit;

C. proc sql;

   drop index from work.staff;

   quit;

D. proc sql;

   delete index from work.staff;

   quit;

13. Given the following SAS program:

proc Sql;

Select product, type, Sum(sales) as revenue

from one

group by product, type;

quit;

Which one of the following clauses should be added to the program to sort the output by PRODUCT and decreasing REVENUE?

A. order by 1, 3

B. order by 1, 3 desc

C. orderby product, revenue desc

D. order by product, desc revenue

14. Given the following SAS data set ONE:

ONE

NUM VAR

------ ------

  1 A

  2 B

  3 C

Which one of the following SQL programs deletes the SAS data set ONE?

A.

proc sql;

delete table one;

quit;

B.

proc sql;

alter table one

drop num, var;

quit;

C.

proc sql;

drop table one;

quit;

D.

proc sql;

delete from one;

quit;

15. Given the SAS data sets ONE and TWO:

```
        ONE                     TWO

YEAR  QTR BUDGET     YEAR QTR  SALES

--------  ---  ------------    --------  -----  --------

2001   3     500       2001    4      300

2001   4     400       2002    1      600

2002   1     700
```

The following SAS program is submitted:

proc sql;

select one.*, sales from one, two;

quit;

Which report is generated?

A. YEAR QTR BUDGET SALES

```
   -------  -------  ------------  ---------

   2001     3      500     300
```

```
  2001    4      400       .

  2002    1      700       600
```

B. YEAR QTR BUDGET SALES

--------- ------ ------------ ---------

```
  2001    3      500       .

  2001    4      400       300

  2002    1      700       600
```

C. YEAR QTR BUDGET SALES

--------- ---   ------------ ---------

```
  2001    3      500       300

  2001    4      400       300

  2002    1      700       600
```

D. YEAR QTR BUDGET SALES

--------- ---   ------------ ---------

```
  2001    3      500       300

  2001    4      400       300

  2002    1      700       300

  2001    3      500       600

  2001    4      400       600

  2002    1      700       600
```

16. Which of the following is true about a noncorrelated subquery in SAS?

A. The outer query executes before the subquery.

B. The subquery executes once before the outer query.

C. The subquery creates a data set in the WORK library.

D. The subquery can reference tables in the FROM clause in the outer query.

17. The following SAS program is submitted:

proc sort data=class out=class1 nodupkey;

by name course ;

run;

Which SQL procedure program produces the same results?

A. proc sql;

    create table class1 as

    select distinct name, course

from class;

quit;

B. proc sql;

    create table class1 as

    select nodup name, course

    from class;

quit;

C. proc sql;

create table class1 as

select exclusive name, course

from class; quit;

D. proc sql;

    create table class1 as select name, course

    from class order by distinct name;

    quit;