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INDUSTRIAL AND COMMERCIAL JOB TRAINING

FOR WOMEN IN MOROCCO

Number 0147

SEVENTH QUARTERLY PROGRESS REPORT

January 1982

**america-mideast educational & training services, inc.**

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I. EXECUTIVE SUMMARY

This seventh quarterly progress report on the Commercial and Industrial Job Training Project for Women in Morocco will focus on project activities involving the AMIDEAST team in Morocco, staff at AMIDEAST Headquarters in Washington, DC and the six Moroccan participants pursuing graduate studies in the U.S.

In Morocco proper, both the team psychologist and the economist continue to experience difficulty in meeting original target deadlines with regard to the psychological and economic surveys, due to circumstances beyond their control dealt with at great length in earlier reports. On the other hand, this report provides job placement figures to date as well as current and future strategies to promote job placement. While the figures are not discouraging, particularly with regard to electricity/electronics graduates, this activity must receive top priority.

The report also outlines the considerable progress being registered by the two skills training specialists in their spheres of activity and discusses the programs, now in their final phase, of the six Moroccan women in the U.S. for graduate study. All are expected to obtain their degrees on schedule, with the possible exception of Ms. Remh.

Planning has begun with regard to the programs of the additional participants called for in Amendment #3 to the contract; although recruitment difficulties are being experienced, these obstacles do not appear at this stage to be overwhelming.

Recommendations center on the need for prompt identification of possible candidates for the supplementary training programs referenced above and the desirability of the early release of the AID Mid-Project Evaluation Report.

## II. INTRODUCTION

This report discusses project activities over a three-month period, October through December 1981. Activities in the field, at AMIDEAST Headquarters and concerning the six Moroccan participants are presented in Part III. Issues and recommendations comprise Part IV, and Appendices appear in Part V.

AMIDEAST is very pleased to present its Seventh Quarterly Progress Report on the INDUSTRIAL AND COMMERCIAL JOB TRAINING PROJECT FOR WOMEN IN MOROCCO.

### III PROJECT ACTIVITIES

The following activities will be dealt with in this chapter:

- A. AMIDEAST activities in the field. (Morocco)
- B. Activities at AMIDEAST Headquarters. (Washington, DC)
- C. Activities of the six Moroccan participants in the U.S.

#### A. AMIDEAST Activities in the Field (Morocco)

These activities will be discussed as follows:

1. Research
2. Job placement and counseling
3. Technical training

##### 1. Research

On December 7, 1981 the team economist, Mr. Gomez, submitted to the OFPPT a report outlining the methodology employed in conducting the economic survey. In-depth analysis is expected to be completed at the Department of Statistics in Rabat during the next quarter, following which a more detailed report on the findings of the survey should become available.

Dr. Graeff, as team psychologist, is continuing to make as much progress as is possible under the circumstances in her data analysis of the psychological survey. An interim report is expected by mid-February.

##### 2. Job Placement and Counseling

###### a) Placement

The AMIDEAST team in Morocco has concentrated its efforts this quarter on activities designed to promote the placement of OFPPT graduates in jobs commensurate with the technical training and skills they have acquired.

Placement of OFPPT graduates is generally achieved in one of two ways: 1) directors of OFPPT centers are expected to actively seek openings for their graduates through their contacts in the business community and the unions and thus facilitate the hiring of a certain number of graduates, and 2) through the OFPPT Placement Office, which processes requests from the business community for trained technicians and periodically canvasses this sector, soliciting jobs for the graduates.

Although both mechanisms contribute to the placement of graduates, it is always highly desirable that each trainee participate in a "stage en entreprise", a period of on the job training which provides students with an ideal opportunity to display their expertise and eventually, depending on the availability of work, be hired.

As 1981 marked, for the first time, the arrival on the job market scene of female graduates with industrial skills, concerted efforts were made to secure on the job training for all second-year students, particularly in the areas of electricity/electronics and industrial drafting.

In early April 1981 the electricity/electronics and industrial drafting experts as well as the psychologist and team leader personally initiated a wide range of contacts in an effort to assist the OFPPT in their endeavors to place the women. By the end of July, all second-year students had been exposed to on the job training and afforded the opportunity to be hired, if indeed there were openings in the companies where they had done their "stage"

When classes resumed in September, a number of graduates had still been unsuccessful in securing work. A new initiative was undertaken, focusing this time on foreign firms, particularly American ones,

but with mixed results. Several companies offered assurances, however, that if openings were to develop, the women would be given priority.

In November a list of twenty-one companies that had responded favorably to the economic survey was drawn up in order that each might be personally contacted by the director of the Placement Office. The manager of each business was to receive a personal letter signed by the Director General of the OFPPT. (A list of potential employers of electricity and drafting graduates appears in Appendix C, and the Director General's letter comprises Appendix D). The results of these efforts should appear in the next quarterly report.

Below are placements to date. These figures reflect the findings of a survey conducted in September 1981. To what extent women who reported themselves on the job at that time are still employed is not known, nor whether those who were job hunting at that time are still jobless. In January 1982, all graduates of the program were to have been sent a questionnaire to determine the extent of employment. Not included in the figures below are four women who were initially employed by a car-parts (electrical wiring) assembly firm but subsequently left because they felt their technical skills were being underutilized.

PLACEMENT OF GRADUATES AS OF DECEMBER 31, 1981

	Trained	Placed	Percentage
Industrial Drafting	14	3	21%
Electricity	14	11	78%
Electronics	18	11	61%
Secretarial Skills	23	12	48%
Accounting	7	5	71%
<b>TOTAL:</b>	<b>76</b>	<b>42</b>	<b>55%</b>

Graduates earn a mean salary of DH 690 per month, the range being between DH 580 and DH 800.

Efforts to maintain contact with graduates after they have left the centers and entered the working world continue. One example of this is a visit made by the industrial drafting specialist, Mr. Callahan, to the job site of one of his former trainees. She indicated that she was very happy in her work and reported having had few problems adjusting to her new environment. Her employer was also interviewed and expressed satisfaction with the caliber of the training she had received in the program.

b) Counseling

The electricity/electronics expert, Mr. Coowar, organized a tour of an electronics factory for the second-year girls which gave them a preview of the type of work they might well be involved in in future. Mr. Coowar has had remarkable success in placing graduates in permanent jobs. To date, 22 graduates in electricity/electronics, 70% of all trainees in this category, have secured employment.

On a recent visit to Fez, he visited an electric motor and engine manufacturer in the region in the company of the director of the local OFPPT center. As a result of that visit, 13 second-year girls were placed in on the job training, i.e. "stages." The girls will be assigned to the electric motor section and will start at the beginning of next year. The company has further expressed its willingness to recruit some of these students for their electrical department when they graduate. With their future employment in mind, part of their electricity training program is now being geared towards the specific needs of the company, with more emphasis on motor construction and winding.

During the next quarter, Dr. Graeff, team psychologist, will attempt to schedule interviews with as many graduates of the program as possible with a view towards determining how well they have adapted to the workplace. She will also provide those who are still unemployed with job counseling strategies.

### 3. Technical Training

During the last quarter, the electricity/electronics specialist, Mr. Coowar, has been closely involved with the implementation of the Technicians' program and the demonstration of laboratory experiments.

After an initial delay, the Technicians' course started on October 1, 1981. Mr. Coowar participated, along with his Moroccan counterparts, in a meeting held October 28 to review course progress. (See minutes of meeting in Appendix E).

The following experiments were carried out in the context of the development of the laboratory courses and the demonstration of equipment:

- Security, energy sources and measures
- Components and symbols
- The electronic multimeter
- Feeders
- Soldering exercises
- Plates
- Ohm's law
- Parallel series circuits
- Capacity
- Time constants
- Introduction to semi-conductors
- Diodes
- Simple and double alternating rectifier
- Series resonance
- Parallel resonance
- Filters and tension doublers
- Transistor verification
- Transistor polarization
- Polarization stability
- Earth transmission
- Earth base
- Earth collector
- Single transistor power amplifier
- Shunt tension regulator
- Series tension regulator.

Mr. Coowar also gave a one-hour lecture on polarization stability for the second-year CQP girls. Classes on basic electronics are being offered to non-electronics instructors who have expressed the desire to further their knowledge in this field. During a visit to Fez, he gave additional demonstrations on the use of the electrical equipment already in place and assisted in the setting-up of the electrical installation console.

The industrial drafting specialist, Mr. Callahan, devoted a great deal of his time this past quarter to developing the math program and making transparencies and three-dimensional aids. (See Appendices A and B)

B. Activities at AMIDEAST Headquarters (Washington, DC)

The most significant event to take place at AMIDEAST headquarters last quarter was the resignation and departure of the Project Director, Dr. Samira Harfoush, effective December 31, 1981. Her replacement, Diana Kamal, assumed her functions as Project Coordinator as of January 1, 1982.

AMIDEAST headquarters has continued, over the past quarter, to carry out the following responsibilities: ensure liaison with the team in Morocco, supervise the progress and activities of the six Moroccan graduate students in the United States, maintain efficient links with AID/Washington, AID/Rabat and the OFPPT, and finally, facilitate the procurement and shipping of the few remaining pieces of equipment and materials.

During the last quarter shipments 12, 13, 14 and 15 containing materials for the project were received by the team. In addition, replacement materials for the project vehicle (shipment 16) were sent to the team on November 26, 1981. The remaining electronic components and power tools (shipment 17) were sent to the team on January 1, 1982. Since

the budgeted funds for materials procurement on this contract have been exhausted, the procurement process conducted by AMIDEAST Headquarters has now been completed.

Amendment #3 to the contract, negotiated in October 1981, modified the scope of the project to include 19 additional participants to be sent to the United States for training. Six will engage in graduate studies in a variety of engineering fields: electrical engineering, electronics, computer science, mechanical, civil and industrial engineering. Nine others will undergo a one-year program in electricity, electronics, and industrial and construction drafting. Four short-term participants will take part in workshops and seminars in different disciplines over a 4-month period. Prior to her departure, the Project Director had established contact with a variety of organizations, universities and research centers where the participants could eventually be placed. Efforts along this line will continue next quarter. It is hoped that selection of the candidates will take place in a timely fashion so as to avoid, as much as possible, delays that could have most undesirable results.

C. Activities of the Six Moroccan Participants in the U.S.

With the exception of Ms. El-Hajoui, who required a longer period of intensive English training, all the participants began their graduate studies Fall 1980. Ms. Cherkaoui and Ms. Remh are pursuing graduate studies in Economics at Arizona State University and the University of San Francisco, respectively. Ms. Chihani and Ms. Bennimas are studying Vocational Education at the University of Wisconsin at Stout. Ms. Bennimas is doing a double major that will enable her to obtain a second Master's degree in Management Technology. Ms. Alaoui also has a double major: Psychology and Counseling. Ms. Hajoui is studying Educational Psychology at the University of San Francisco.

All the participants, with the exception of Ms. Remh, attended conferences in their fields this past semester. (See Appendix F for their reports.)

1. Ms. Malika Benimmas (M.S. in Vocational Education  
M.S. in Management Technology)

Ms. Benimmas continues to be an excellent student. Her grade point average at the end of the fall semester 1981 was 3.9. Her courses and grades for the fall were as follows:

Course No.	Course Title	Credit Units	Grade
150-700	Systems Analysis & Design	3	B+
150-710	Seminar in Industrial Operations	3	A
42i-641	Educational Evaluation	2	B+
160-206	Accounting I	3	B
150-200	Production Management	3	A

Ms. Benimmas is taking the following courses and working on her two Master's theses during the spring semester 1982:

Course No.	Course Title	Credit Units
199-560	Cooperative Occupational Education Program	2
198-550	Introduction to Training	2
150-740	Introduction to Decision Theory	3
150-540	Time and Motion Study	3
150-505	Production & Inventory Control	3
150-720	Foundations of Industrial Operations	2

2. Ms. Nadia Chihani (M.S. in Vocational Education)

Ms. Chihani is also maintaining her status as an excellent student with a grade point average of 3.8. The following is a list of the courses she took in the fall of 1981:

Course No.	Course Title	Credit Units	Grade
469-534	Task Analysis	2	A
469-736	Problems in Vocational Education	2	I
150-600	Organizational Leadership	3	A
421-700	Philosophy of Modern Education	2	B+
469-560	Cooperative Occupational Education Program	2	A
469-550	Introduction to Training	2	A

In addition to doing her thesis Ms. Chihani is taking the following courses in the spring 1982 semester:

Course No.	Course Title	Credit Units
421-742	Program Evaluation	3
195-733	Impacts of Technology	2
199-674	Adult Education	2
479-570	Assertiveness Training	2

Ms. Chihani has been accepted as a fellow at the International Center for Research on Women for the summer in Washington, DC.

3. Ms. Mouna Cherkaoui (M.S. in Economics)

Ms. Cherkaoui took the following courses in the fall 1981:

Course No.	Course Title	Credit Units	Grade
ECON 592	Independent Research	3	I
ECON 570	Economics of Developing Countries	3	B
ECON 580	Econometrics	3	B

In addition to preparing for her comprehensive exams Ms. Cherkaoui is taking the following courses during the spring 1982 semester:

Course No.	Course Title	Credit Units
ECON 521	Manpower Economics	3
ECON 514	Micro Economics - Theory II	3
ECON 590	Reading and Conferences	3

4. Ms. Asmaa El Alaoui (M.A. in Social Psychology and M.A. in Counseling Psychology)

The following is the list of courses Ms. El Alaoui took during the first trimester of fall 1981:

Course No.	Course Title	Credit Units	Grade
CPSY 566	Psychopathology	4	B
MS 521	Data Processing	4	B
PSY 570	Independent Study	2	I

She took the following during the second trimester of fall 1981:  
(Grades not yet available.)

Course No.	Course Title	Credit Units
CPSY 581	Theories of Counseling	4
CPSY 583	Procedures & Techniques of Counseling	4
MngSC 581	Personnel Management	4
MngSC 583	Production & Operation Management	4

In addition to writing her thesis Ms. El Alaoui is taking the following courses during the current trimester:

Course No.	Course Title	Credit Units
MngSci 585	Organizational Behavior	4
SocPsy 540	Social Psychology of Attitudes	4
Cpsy 540	Practicum in Counseling	4

5. Ms. Rouhel Kouloub El-Hajoui (M.A. in Educational Psychology)

The following is a list of courses taken by Ms. El-Hajoui during the fall 1981 semester:

Course No.	Course Title	Credit Units	Grade
EdPsy 245	Techniques of Counseling	3	B+
EdPsy 261	Transitional Counseling	3	A-
CARTS 74	Dynamics of Speaking	3	B-
P.E. 10	Hatha Yoga	1	C

At the moment Ms. El-Hajoui is taking the following courses and doing extensive field work to complete the requirements of her degree before the end of August 1982:

Course No.	Course Title	Credit Units
Ed Psy 643	Occupational Guidance	3
Ed Psy 644	Psychology of Careers	3
Ed Psy 659	Career Counseling Field Work	3
EdPsy 603	Methods of Educational Research	3

6. Ms. Fatiha Remh (M.A. in Economics)

As discussed in earlier reports, Ms. Remh has had considerable difficulty in meeting the requirements for the M.S. in Economics at the University of San Francisco. Last semester, at her advisor's suggestion, Ms. Remh took only two courses, as both were deemed extremely demanding and it was feared Ms. Remh would be unable to perform satisfactorily with a heavier courseload. Her results this semester are again disappointing and leave open to question whether or not she will indeed graduate in August on schedule. She has yet to complete 5 courses for her degree as well as write a thesis. Recommendations pertaining to this situation appear in Part IV.

In the fall semester of 1981 Ms. Remh took the following:

Course No.	Course Title	Credit Units	Grade
ECON 202	Macro-Economics	3	B-
ECON 201	Micro-Economics	3	C+

Ms. Remh is taking the following courses during the spring 1982 semester and needs to complete two more this summer along with her thesis in order to graduate.

Course No.	Course Title	Credit Units
ECON 601	Micro-Economics	3
ECON 641	Managerial Economics	3
ECON 643	Commodity Analysis	3

#### IV. ISSUES AND RECOMMENDATIONS

While overall project progress to date has continued to be most satisfactory, implementation of stipulations outlined in Amendment #3 relating to the training in the United States of six additional female participants in engineering fields at the Master's level is proving more problematic than anticipated due to the seeming paucity of appropriate female candidates. The OFPPT is presently considering the available alternatives, including the possibility of training almost exclusively male candidates. Although these difficulties may indeed be considerable, all options should be carefully weighed and their consequences calculated. Training a majority of male candidates cannot be readily justified in the context of a Moroccan Women's Training Project. AMIDEAST recommends that additional efforts be undertaken to identify suitable women before this decision is finalized, notwithstanding the possible need for additional funding or the training of fewer participants.

Another issue that may want to be considered by the OFPPT in determining the nature of the training envisaged for the Master's level applicants is the current academic status of Ms. Fatiha Remh, majoring in Economics at the University of San Francisco. Ms. Remh's academic performance to date has not been remarkable: there is a distinct possibility that she will be unable to complete her degree requirements in time to return to Morocco as scheduled in August, and will require an additional semester to finish her thesis and/or undertake supplementary coursework to bring up her average. The outcome is difficult to predict as so much depends on her ability and desire to perform. AMIDEAST is in very close contact with both the student and her academic advisor and can only hope for the best; it must

be pointed out, however, that the OFPPT might find it advantageous to contemplate training a second candidate in Economics rather than in one of the engineering fields.

Preparations for the programs in the U.S. of the nine one-year applicants as well as for the four short-term participants have begun and are proceeding smoothly with no major obstacles or delays anticipated.

In conclusion, it is important to note that the AID Mid-Project Evaluation Report has not yet become available to AMIDEAST. This report could constitute a very useful tool in AMIDEAST's ongoing efforts to assess, formulate and implement activities relating to the project, particularly in this its final phase. The project team will be on site through December 31, 1982 with the exception of the electricity/electronics specialist who will be there through July 1983. In order for AMIDEAST to be in a position to act on any recommendations growing out of the evaluation process, it is essential that it have the requisite time at its disposal to do so.

V.

APPENDICES

- A. Mr. Nolan Callahan's Curriculum for Mathematics Program for Drafting Trainees
- B. Transparencies and Three-Dimensional Aids for Drafting Program
- C. List of Potential Employers of Electricity & Drafting Graduates
- D. Director General's Letter to Employers
- E. Minutes of Meeting of Mr. Feroze Coowar and Moroccan Counterparts on Progress of Technicians' Course
- F. Conference Reports of Participants

O.F.P.P.T

C.Q.P

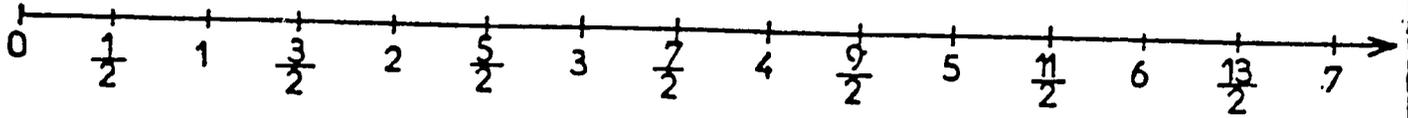
HAY EL MOHAMMADI

REPRESENTATION GRAPHIQUE  
DES NOMBRES

(Exercice oral)

MATHÉMATIQUES

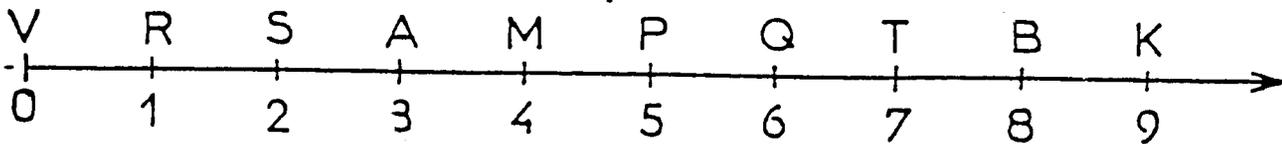
La représentation des nombres sur une ligne ci-dessous



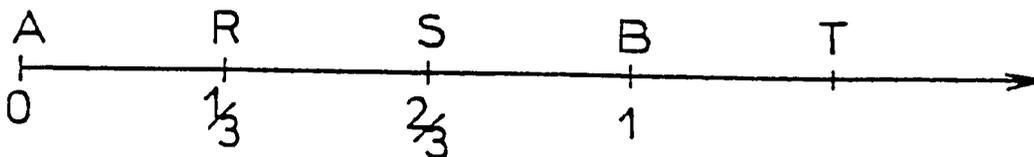
Donner les coordonnées des points sur la ligne ci-dessous:

Quel est le coordonnée du point B?

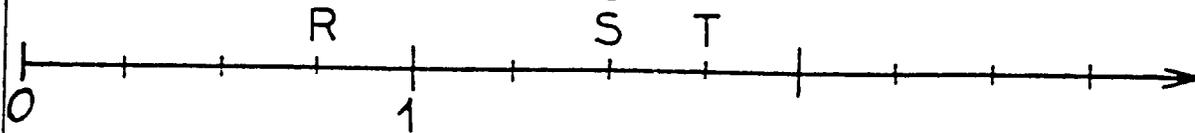
La coordonnée du point B est 8?

Quel est la coordonnée de  $1\frac{1}{4}$  ?La coordonnée de  $1\frac{1}{4}$  est un  $\frac{1}{4}$  quart de la distance de R à S.

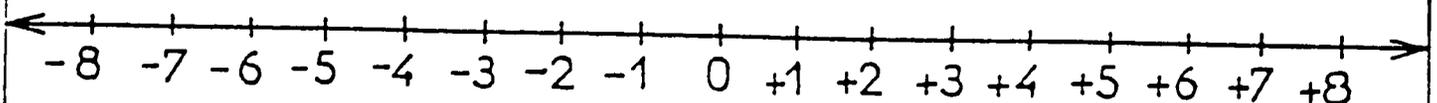
Donner les coordonnées des points ci-dessous.



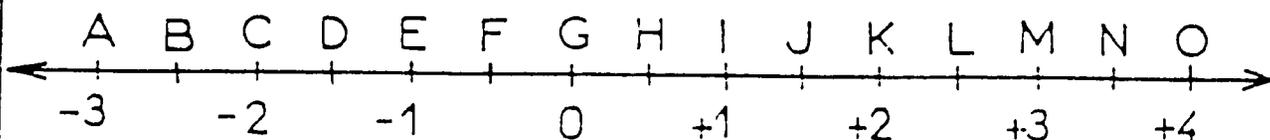
Donner les coordonnées des points ci-dessous.



La représentation des nombres positifs et négatifs sur une ligne ci-dessous.



Donner la coordonnée des points ci-dessous



Exercice oral

Dire si chaque problème est vrai ou faux

Exemple 1.  $2 + 4 = 3 + 3 = 6$

c'est vrai parce que  $2 + 4$  égal 6, et  $3 + 3$  égal 6

Exemple 2.  $3 \times 9 = 9 : 3$

c'est faux parce que  $3 \times 9$  égal 27, et  $9 : 3$  égal 3

1.  $2 \times 4 = 2 \times 2 \times 2$
2.  $7 \times 5 = 5 \times 7$
3.  $2 + 3 = 7 - 2$
4.  $6 + 0 = 5 + 1$
5.  $6 \times 0 = 5 + 1$
6.  $5 - 4 = 1 + 0$
7.  $8 : 4 = 4 : 8$
8.  $2 + 10 = 5 + 7$
9.  $3 \times 4 = 9 + 0 + 9/3$
10.  $9 \times 0 = 1 \times 0$
11.  $49 - 9 = 4 \times 5 \times 2$
12.  $2 + 2 + 2 = 3 \times 2$
13.  $0,001 + 8 = 0,008 + 1$
14.  $3 \times 1 = 1/8 \times 24$
15.  $19 - 3 - 2 = 19 - 5$
16.  $8 \times 1 = 2 \times 4 \times 1$
17.  $6 : 1 = 6/1$
18.  $10 \times 1/5 = 10 \times 0.2$
19.  $1 + 5 + 4 = 10 - 1$
20.  $12 : 3 = 2 \times 5$
21.  $19 - 2 - 2 - 2 = 19 - 6$
22.  $8/2 = 2 \times 1 \times 2$
23.  $1 : 5 = 5 : 1$

(B)

Exercice écrit

Dire si chaque problème est vrai ou faux

1.  $8 \times 2,5 = 6 \times 4,5$
2.  $0,5 + 0,4 + 0,3 = 0,3 \times 0,4$
3.  $1/3 + 1/2 = 3/6 + 2/6$
4.  $1/0,1 = 2/0,2$
5.  $5/8 : 15 = 24$
6.  $6 : 2/3 = 4$
7.  $17 \times 1 \times 5 = 100 : 3/17$
8.  $0,1 \times 0 \times 8 = 0 : 4/5$
9.  $\frac{42 - 15}{14 - 5} = \frac{5 \times 3}{5 : 3}$
10.  $\frac{51 + 14}{17 - 7} = 1 \frac{2}{3} + 8 \frac{1}{3} - 3 \frac{1}{2}$

Dans chaque problème il faut remplacer le point d'interrogation avec un nombre qui fait la déclaration vraie:

11.  $8 + 9 + ? = 31 - 12$
12.  $32 + 19 + ? = 86 - 35$
13.  $3 \frac{2}{3} - ? = 3/4 + 1/3$
14.  $6 \frac{1}{2} - ? = 2 \frac{1}{3} + 1 \frac{5}{6}$
15.  $0,7 - 0,3 = 2 \times ?$
16.  $0,7 + 0,3 = 0,7 : ?$
17.  $0,24 : 0,6 = 1 - ?$
18.  $3,6 : 0,9 = 1 : ?$

(B)

Exercice écrit

Dire si chaque problème est vrai ou faux

1.  $8 \times 2,5 = 6 \times 4,5$
2.  $0,5 + 0,4 + 0,3 = 0,3 \times 0,4$
3.  $1/3 + 1/2 = 3/6 + 2/6$
4.  $1/0,1 = 2/0,2$
5.  $5/8 : 15 = 24$
6.  $6 : 2/3 = 4$
7.  $17 \times 1 \times 5 = 100 : 3/17$
8.  $0,1 \times 0 \times 8 = 0 : 4/5$
9.  $\frac{42 - 15}{14 - 5} = \frac{5 \times 3}{5 : 3}$
10.  $\frac{51 + 14}{17 - 7} = 1 \frac{2}{3} + 8 \frac{1}{3} - 3 \frac{1}{2}$

Dans chaque problème il faut remplacer le point d'interrogation avec un nombre qui fait la déclaration vraie:

11.  $8 + 9 + ? = 31 - 12$
12.  $32 + 19 + ? = 86 - 35$
13.  $3 \frac{2}{3} - ? = \frac{3}{4} + \frac{1}{3}$
14.  $6 \frac{1}{2} - ? = 2 \frac{1}{3} + 1 \frac{5}{6}$
15.  $0,7 - 0,3 = 2 \times ?$
16.  $0,7 + 0,3 = 0,7 : ?$
17.  $0,24 : 0,6 = 1 - ?$
18.  $3,6 : 0,9 = 1 : ?$

**O.F.P.P.T**  
C.O.P  
HAY EL MOHAMMADI

COMPARER LE NOMBRE AU SIGNE  
D'INEGALITE  
(A)

MATHEMATIQUES  
ALGEBRE

Pour changer une déclaration qui est fausse à une qui est juste, on peut utiliser le symbole ( $\neq$ ) qui veut dire "c'est par égal".

$7 = 6 - 3$  c'est faux

$7 \neq 6 - 3$  c'est juste.

Un autre symbole d'inégalité est ceci ( $>$ ) qui veut dire "est plus grand que". Donc  $5 > 3$  signifie que cinq est plus grand que trois.

Le symbole ( $<$ ) signifie "est moins que". Quand on écrit  $3 < 5$  ça signifie que "trois est moins que cinq"

Vous vous rappelez de la déclaration "3 qui se trouve entre 1 et 5", qui signifie 3 est plus grand que 1 et 3 est moins que 5. Symboliquement on peut écrire:

$3 > 1$  et  $3 < 5$

Normalement on met ces deux déclarations ensemble et on écrit symboliquement  $1 < 3 < 5$  ou graphiquement



Cette nouvelle expression traduit "1 est moins que 3, et 3 est moins que 5" ou "3 se trouve entre 1 et 5". Cette expression illustre la netteté et l'économie d'espace des symboles de mathématiques.

Dire si les déclarations ci-dessous sont vraies ou fausses:

Exemple 1.  $7 + 2 = 3 \times 3$

C'est vrai parce que  $7 + 2$  et  $3 \times 3$  désignent le nombre 9.

Exemple 2.  $\frac{10 + 2}{2} \neq 10 + 1$

C'est vrai parce que  $\frac{10 + 2}{2}$  désigne 6, mais  $10 + 1$  désigne 11.

Exercice oral

1.  $48 - 4 \neq 6 \times \frac{8}{2}$

2.  $1 \times 110 \neq 110$

3.  $2 \times 7 \neq 7 \times 7$

4.  $18 + 0 = 3 \times 6$

5.  $7 + 5 < 4 \times 5$

6.  $\frac{5 + 1}{2} = 4 - 1$

7.  $\frac{12 + 8}{5} > 2 \times 2$

8.  $\frac{48 - 12}{12} < 48 - 1$

9.  $\frac{15 + 18}{3} \neq 5 + 6$

10.  $\frac{12 + 5}{2} > 10$

11.  $\frac{1}{2} + \frac{3}{6} > 1$

12.  $12 + 0 \neq 15 + 0$

13.  $\frac{23}{1} < 23$

14.  $15 \times 0 \neq 15 \times 0$

Mettre une vraie déclaration pour remplacer chaque point d'interrogation par le signe qui convient: =, > ou <.

Exemple  $5 ? 2$  Solution  $5 > 2$ .

1.  $4 + 5 ? 10 - 1$

2.  $13 \times 0 ? 16 + 1$

3.  $\frac{15}{3} ? 2 + 3$

4.  $\frac{8 - 3}{5 - 2} ? 1 + 0,6$

5.  $6 \times 0 ? 0$

6.  $2 \frac{1}{8} ? 1 + 1 \frac{2}{16}$

7.  $\frac{1}{3} ? \frac{1}{6}$

8.  $\frac{1}{5} + \frac{3}{4} ? \frac{6}{8} + 0,2$

Remplacer chaque point d'interrogation par n'importe quel nombre qui fait les déclarations vraies.

Exemple  $10 \times 2 \neq 20 + ?$ .

Solution  $10 \times 2 \neq 20 + \frac{1}{4}$  (ou n'importe quel nombre sauf 0)

9.  $4 + ? = 11 - 6$

10.  $\frac{15 + ?}{8} = 2$

11.  $\frac{24 + ?}{4} = 6 + 3$

12.  $1.54327 ? 1.53327$

13.  $3 \times ? = 9 + 6$

14.  $1,7 - 1,3 < ? < 1,3 - 1,3$

15.  $\sqrt{7} > ? > \sqrt{6}$

2/2

Il y a deux types de symboles d'inclusion, les crochets [ ], et les parenthèses ( ).

$$\begin{aligned} \text{Exemple : } 5 [ 3 + ( 7 \times 2 ) ] &= 5 [ 3 + ( 14 ) ] \\ &= 5 [ 17 ] \\ &= 85 \end{aligned}$$

Exercice oral

1.  $5 + ( 3 \times 2 )$
2.  $( 8 \div 3 ) + 5$
3.  $( 5 + 3 ) \times 2$
4.  $4( 3 + 7 )$
5.  $[ ( 3 \times 2 ) : 4 ]$
6.  $( 4 \times 3 ) + ( 4 \times 7 )$
7.  $5 [ 2 + 1 - 2 ] + 6$

Exercice écrit

1.  $( 17 + 3 ) 18$
2.  $( 17 \times 18 ) + ( 3 \times 18 )$
3.  $5 \times [ 5 - ( 0 \times 3 ) ]$
4.  $( 27 : 9 ) + [ ( 27 + 9 ) : 3 ]$
5.  $[ ( 16 + 4 ) : ( 3 \times 2 ) ] : 13$
6.  $\frac{100 - 64}{10 + 8} : 12$
7.  $[ \left( \frac{50 + 25}{15} \right) : 5 ] + 1$
8.  $( 16 + 4 ) : [ ( 3 \times 2 ) : 4 ]$
9.  $[ 30 : ( 5 \times 2 ) ] : 3$

O.F.P.P.T.

C.Q.P.  
HAY EL MOHAMMADI

EXPRESSION ALGEBRIQUE

(A)

MATHEMATIQUES

ALGEBRE

Exercice oral

Trouver la valeur de chaque problème ci-dessous.

Donner :  $a = 15$ ,  $b = 3$ ,  $x = 2$ .Exemple : 1.  $5b = 5 \cdot 3 = 15$ 

2.  $\frac{a}{b-x} = \frac{15}{3-2} = 15$

1.  $3a$

2.  $7x$

3.  $a + x$

4.  $a - b$

5.  $\frac{1}{3}a$

6.  $30 : x$

7.  $ab$

8.  $xx$

9.  $2x - b$

10.  $\frac{1}{6}(a+b)$

11.  $42 : (a-1) + x$

12.  $b + b + b$

13.  $a : (b+x)$

14.  $ax - b$

15.  $\frac{bx}{a}$

16.  $\frac{a+b}{x}$

17.  $\frac{a-b}{x}$

O.F.P.P.T.

C.Q.P.

HAY EL MOHAMMADI

EXPRESSION ALGEBRIQUE

(B)

MATHEMATIQUES

ALGEBRE

Exercice écrit

Trouver la valeur de chaque problème ci-dessous

Donner:  $r = 1$ ,  $s = 3$ ,  $t = 12$ ,  $u = 0$ ,  $v = 15$  et  $w = \frac{1}{2}$ 

$$\text{Exemple : } \frac{5s + 3r}{v + 2w}$$

$$\text{Solution: } \frac{5 \cdot 3 + 3 \cdot 1}{5 + 2 \cdot \frac{1}{2}} = \frac{15 + 3}{5 + 1} = \frac{18}{6} = 3$$

1.  $6r + 2s$
2.  $3t - 5v$
3.  $2(3r + s)$
4.  $(st)(st)$
5.  $24(t - 2r)$
6.  $2st - 4sr$
7.  $r + r + u + u + u$
8.  $5s - wt$
9.  $(vv - v) - v$
10.  $(2w - r)(2w + r)$
11.  $(3r + t)(3r + t)$
12.  $\frac{4w + 3r}{7}$
13.  $\frac{3v + t}{5s - t} -$
14.  $\frac{16sw}{(4s)(2r)}$
15.  $\frac{2w(s + r)}{2w(s - r)}$
16.  $\frac{5t - 4}{5t + 4}$

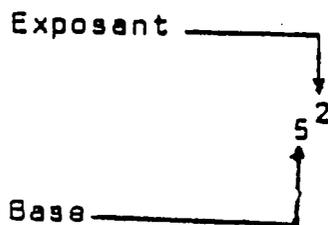
O. F. P. P. T.  
C. Q. P.  
HAY EL MOHAMMADI

LES EXPOSANTS  
(A)

MATHEMATIQUES  
ALGEBRE

Quand on multiplie deux ou plusieurs nombres, chacun de ces nombres est appelé facteur du produit. Ainsi 3 et 7 sont les facteurs de 21.

Des fois un nombre paraît plus qu'une fois comme facteur du produit. Exemple :  $5 \times 5$ . On peut simplifier cet expression en utilisant un exposant  $5^2$ .



Pour comparer un exposant à un coefficient, on compare  $S^2$  et  $2S$  quand on remplace  $S$  par 15.

$$S^2 = S.S$$

$$2S = 2.S$$

$$S^2 = 15.15$$

$$2S = 2.15$$

$$S^2 = 225$$

$$2S = 30$$

Un exposant montre combien de fois une base doit être prise comme facteur.

Un coefficient est un facteur.

Exemple:

$$rs^3 = r.s.s.s.$$

$$(rs)^3 = rs.rs.rs.$$

$$4.5^3 = 4.5.5.5 = 500$$

$$(4.5)^3 = 20.20.20 = 8000$$

$$5 = n^2 = 5 - (n.n)$$

$$(5-n)^2 = (5-n)(5-n)$$

$$15-3^2 = 15 - 9 = 6$$

$$(15-3)^2 = (12)^2 = 144$$

O. F. P. P. T.  
C. Q. P.  
HAY EL MOHAMMADI

LES EXPOSANTS  
(8)

MATHEMATIQUES  
ALGEBRE

Simplifier chacune des expressions ci-dessous:

Exemple:  $3 \cdot 3 = 3^2$

1. b.b
2. c.c.c
3. 7.n.n.n
4. 14.m.m.m
5. nnn
6. 8nnn

Trouver la valeur de chaque expression suivante:

7.  $m^2$ ,  $m = \frac{1}{2}$

8.  $n^2$ ,  $n = \frac{1}{4}$

9.  $4p^2$ ,  $p = 3$

10.  $(9x)^2$ ,  $x = \frac{1}{3}$

11.  $2x^2 + 4x + 5$ ,  $x = 3$

12.  $7z^3 + z^2 - z$ ,  $z = 2$

13.  $a^3 - 2a^2 + a + 4$ ,  $a = 5$

14.  $w^{10} + w^5 = w + 9$ ,  $w = 0$

Trouver la valeur des expressions suivantes:

$x = 5$     $y = 2$     $z = 3$

15.  $x^2 + y^2 - z^2$

16.  $\frac{2x^2 + xy}{20z}$

17.  $\frac{z^3 - 27}{xy}$

18.  $(xz)^3 + y^5$

19.  $\left(\frac{6y}{z}\right)^3 + 3x^2$

20.  $\frac{(x-z)^4 - y^4}{x^2 - y^2}$

21.  $\frac{(2y-z)^3 + y^3}{(2x-z+y)^3}$

O. F. P. P. T.  
C. Q. P.  
HAY EL MOHAMMADI

RESOLUTION DES EQUATIONS  
(A)

MATHEMATIQUES  
ALGEBRE

Résoudre les équations par l'addition et la soustraction.

Exemple:  $5 + x = 18$   
 $5 + x - 5 = 18 - 5$   
 $x = 13$

1.  $x + 2 = 6$
2.  $x - 1 = 8$
3.  $h - 18 = 6$
4.  $r + \frac{3}{5} = \frac{7}{5}$
5.  $b - 0,5 = 3,2$
6.  $75 = 60 + x$
7.  $\frac{11}{9} = \frac{2}{9} + n$
8.  $f + 2,7 = 3,1$
9.  $0,04 + p = 1$
10.  $\frac{3}{4} = 0,75 + r$

Résoudre les équations par multiplication et division

Exemple 1.

$$6K = 84$$

$$\frac{6K}{6} = \frac{84}{6}$$

$$K = 14$$

Exemple 2

$$\frac{n}{4} = 6$$

$$4 \cdot \frac{n}{4} = 4 \cdot 6$$

$$n = 24$$

Exemple 3

$$\frac{2x}{5} = 86$$

$$5 \cdot \frac{2x}{5} = 5 \cdot 86$$

$$2x = 430$$

$$x = 215$$

1.  $\frac{n}{13} = 6$
2.  $17s = 187$
3.  $1,5n = 3$
4.  $0,7 = 0,7m$
5.  $\frac{5}{3} = \frac{1}{12} \cdot x$
6.  $12d = \frac{3}{4}$
7.  $4,5(y) = 12,8$
8.  $0,75 = x : 15$
9.  $4 + 3y = 52$
10.  $2n - 5 = 3,5$

O.F.P.P.T.  
C.Q.P.  
HAY EL MOHAMMADI

RESOLUTION DES EQUATIONS  
(8)

MATHEMATIQUES  
ALGEBRE

Combiner les termes

Exemple 1. Résoudre  $7x + 3x - 4 = 12 + 39$

Solution:  $7x + 3x - 4 = 12 + 39$

$$10x - 4 = 51$$

$$10x - 4 + 4 = 51 + 4$$

$$10x = 55$$

$$\frac{10x}{10} = \frac{55}{10}$$

$$x = 5,5$$

Exemple 2. Résoudre  $n - \frac{3n}{5} + 6 = 27 - 9$

Solution :  $n - \frac{3n}{5} + 6 = 27 - 9$

$$\frac{2}{5}n + 6 = 18$$

$$\frac{2}{5}n + 6 - 6 = 18 - 6$$

$$\frac{2n}{5} = 12$$

$$5 \cdot \frac{2n}{5} = 5 \cdot 12$$

$$2n = 60$$

$$\frac{2n}{2} = \frac{60}{2}$$

$$n = 30$$

1.  $3x + 5x = 34 - 10$

2.  $7n - 3n = 40 + 16$

3.  $45 = 7x + 8x + 30$

4.  $\frac{6}{5}v - v - 5 = 0$

5.  $8,3y + 2,7y + 154 = 154$

6.  $0 = 19n - 57$

7.  $3(x+5) - 2x = 51 - 25$

8.  $\frac{3k}{4} - \frac{11k}{20} - \frac{4k}{5} - \frac{3}{4} = \frac{17}{20}$

O.F.P.P.T.

C.Q.P.

HAY EL MOHAMMADI

RESOLUTION DES EQUATIONS

(C)

MATHEMATIQUES

ALGEBRE

9.  $4,5a - a = 70$

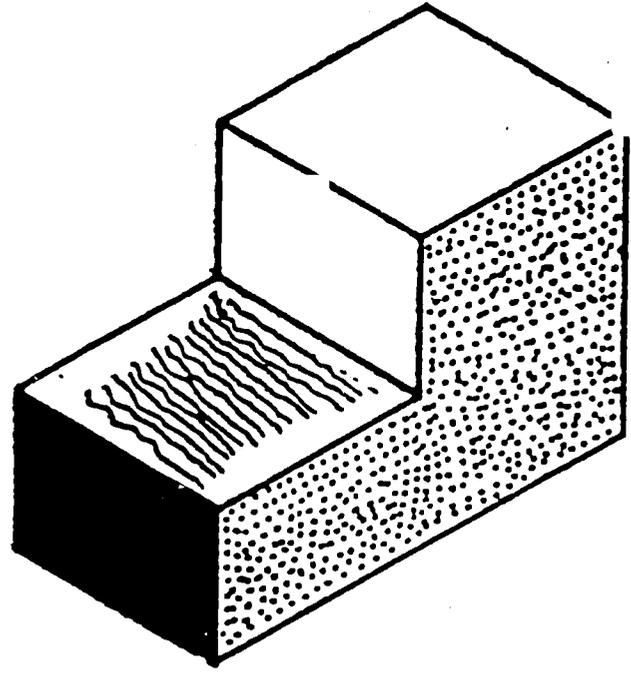
10.  $4a + 3 - \frac{1}{2}a = 10$

11.  $4z + \frac{1}{3} - \frac{2z}{3} = 7$

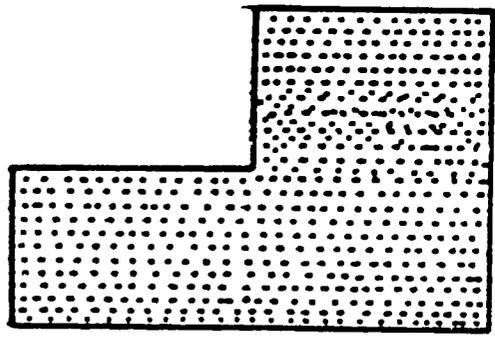
12.  $z + 4 + 2z + 5 + 4z = 51$

13.  $7n + 5 - 3 - n = 8.$

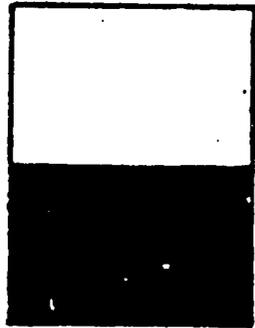
VUE EN PERSPECTIVE



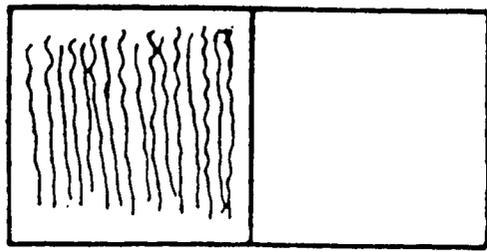
VUE DE FACE



VUE DE GAUCHE



VUE DE DESSUS

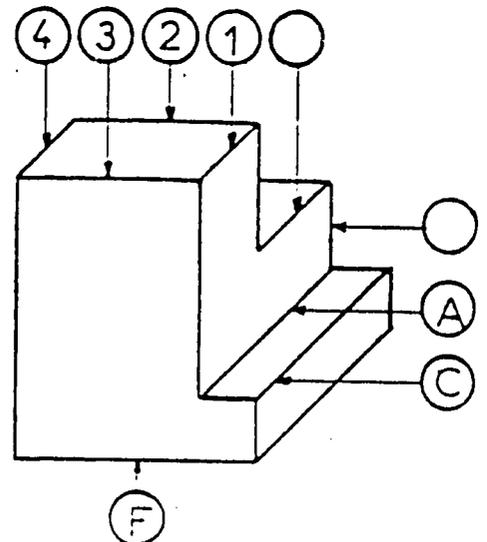
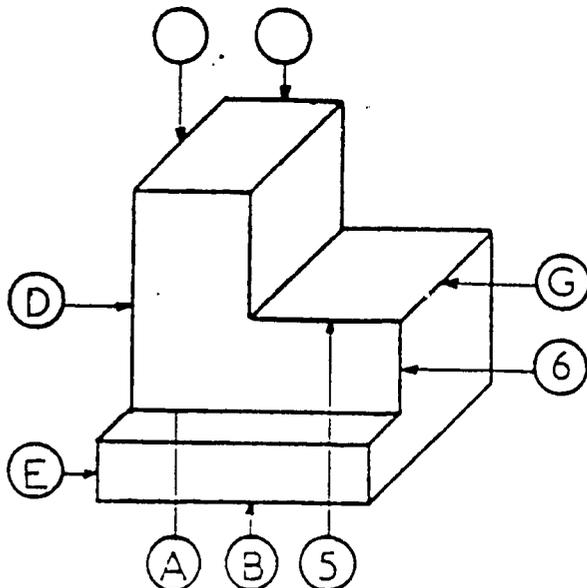
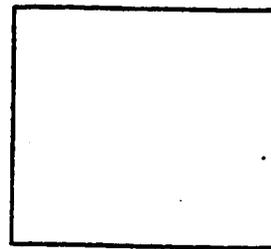
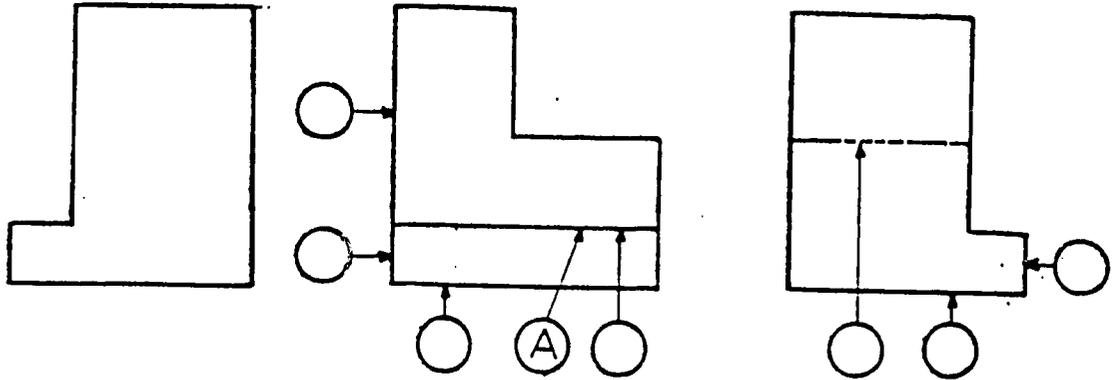


O.F.P.P.T  
C.G.P  
HAY EL MOHAMMADI

LES VUES - INTERROGATION

LEÇON DE  
DESSIN

. Identifier les lignes.  
Compléter la vue à droite et la vue de dessous.

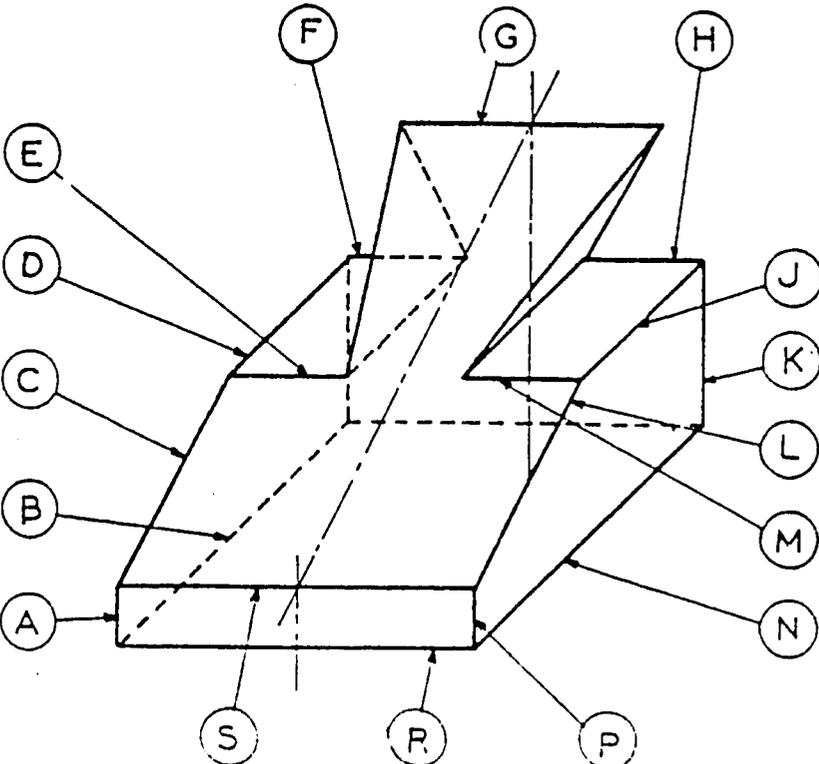
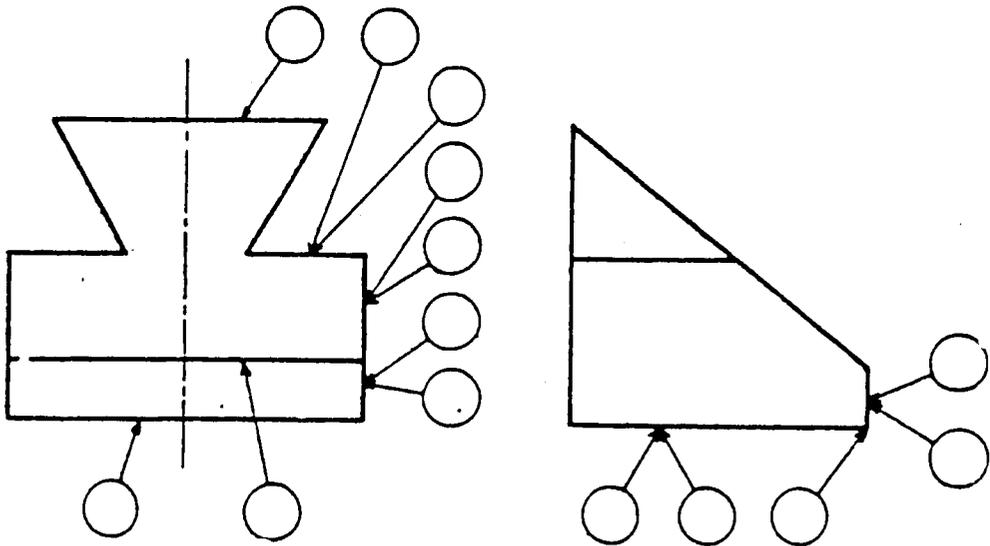


O.F.P.P.T  
C.G.P  
HAY EL-MOHAMMADI

LES VUES - INTERROGATION

LEÇON DE  
DESSIN

IDENTIFIER LES LIGNES

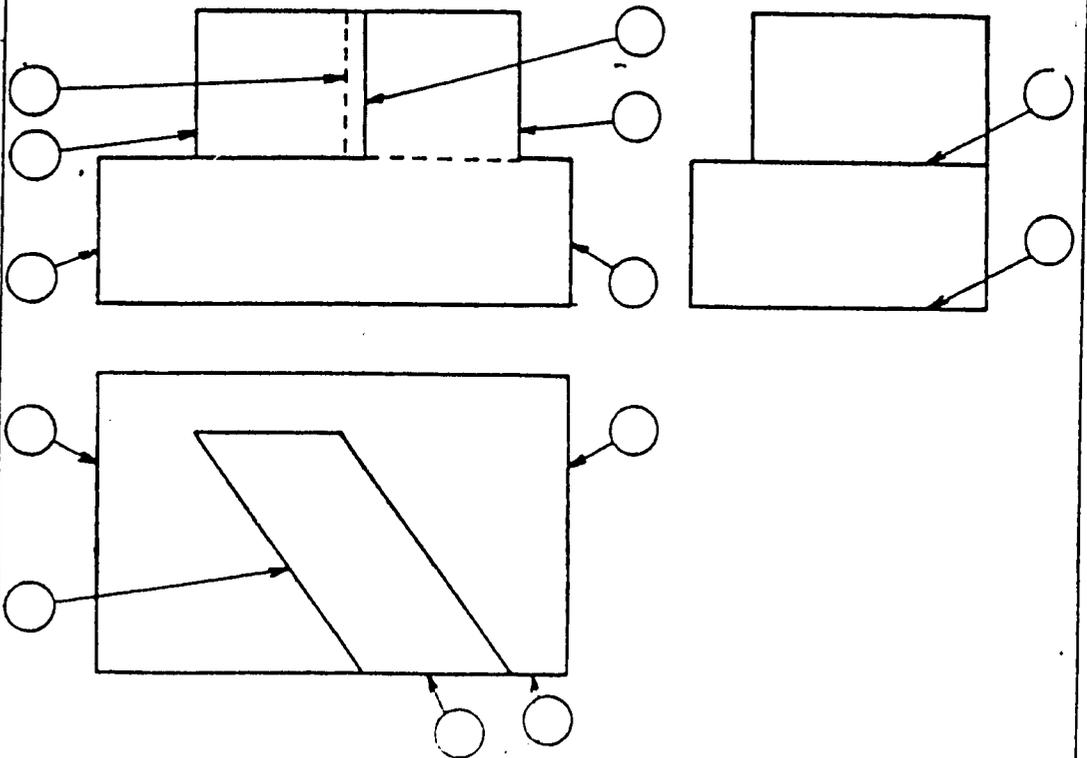
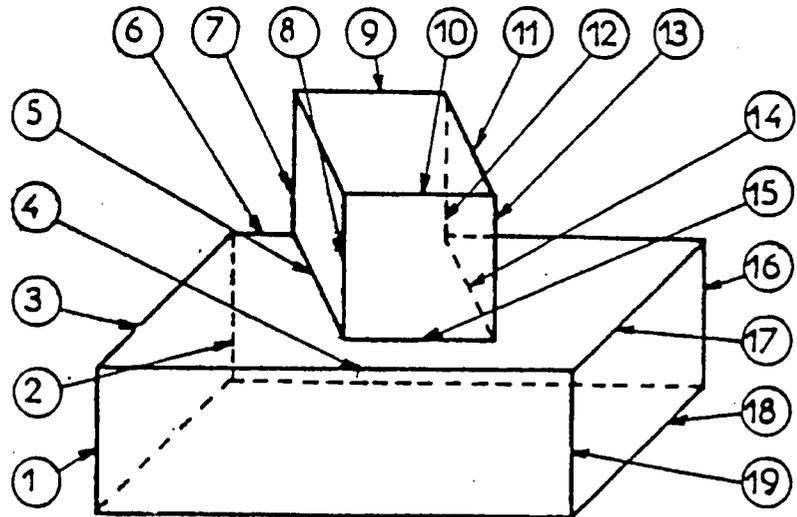


O.F.P.P.T  
C.G.P  
HAY EL MOHAMMADI

LES VUES - INTERPROGATION

LEÇON DE  
DESSIN

IDENTIFIER LES LIGNES.



**LE CYLINDRE**

Placer un cylindre dans le cube de projection

La vue de face est un rectangle

Les droites AB et CD sont les projections des 2 bases

Les droites AC et BD limitent la surface courbe du cylindre

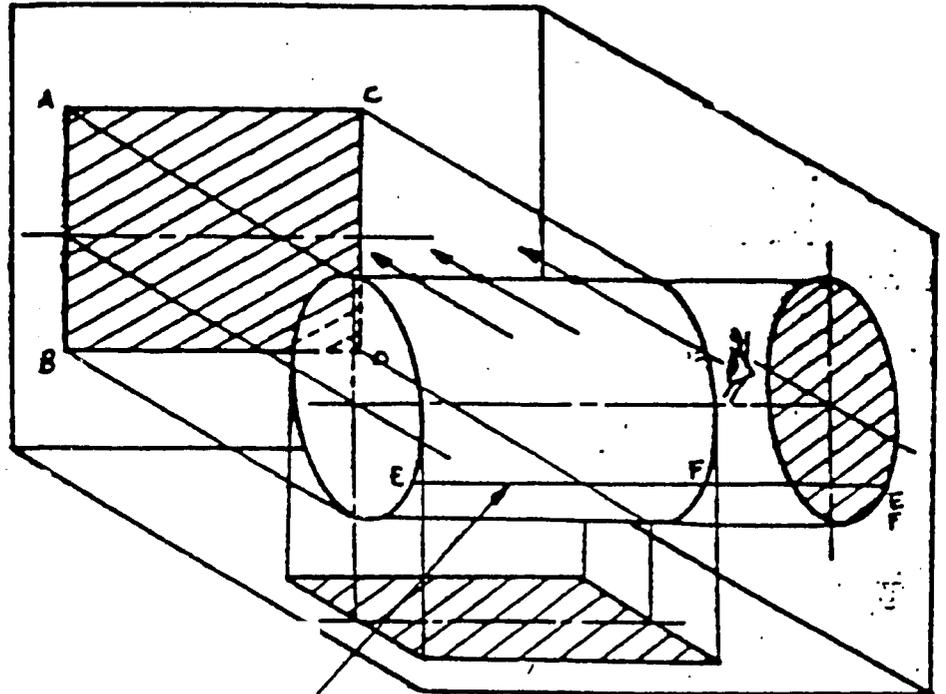
Elles sont déterminées par les projetantes tangentes au cylindre rayons visuels tangents

Ce sont les génératrices de contour apparent du cylindre

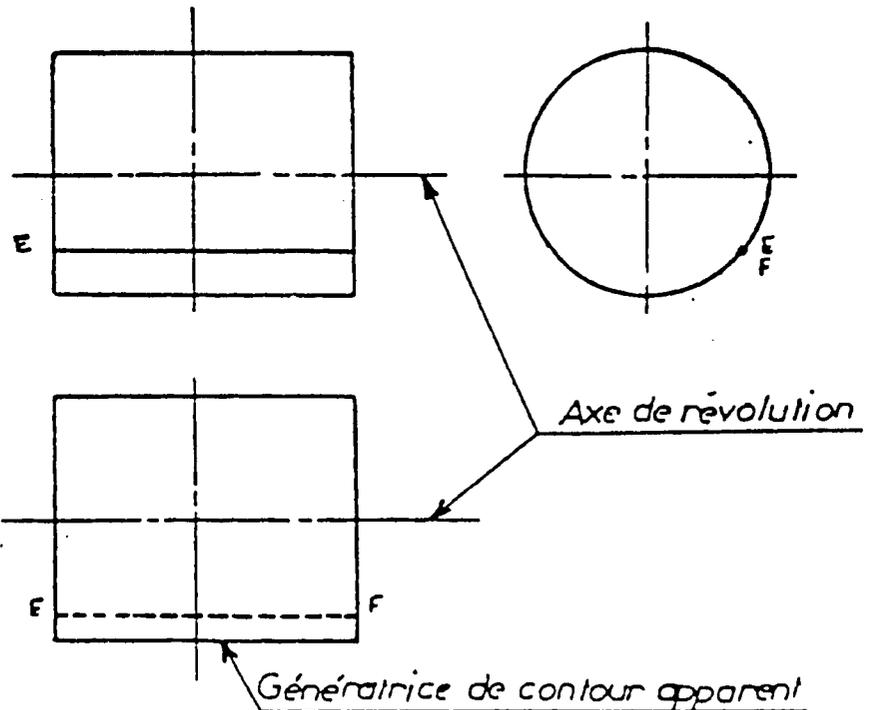
La vue de dessus est un rectangle

La vue de gauche un cercle

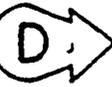
Dans les projections des solides de révolution, on représente toujours l'axe de révolution en trait mixte fin comme les traits d'axes de symétrie

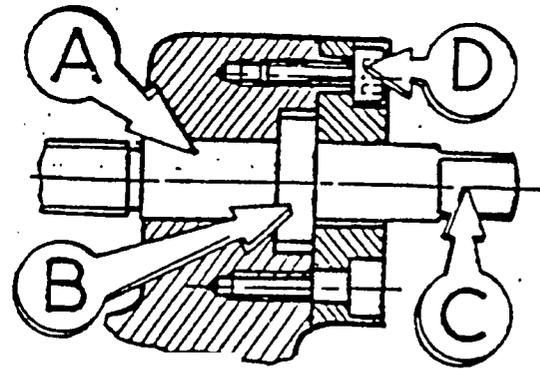
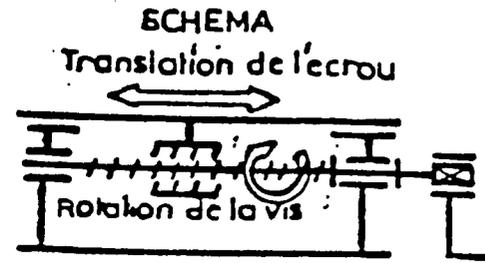


Cette droite est une génératrice quelconque du cylindre. Elle est représentée ci dessous dans les projections

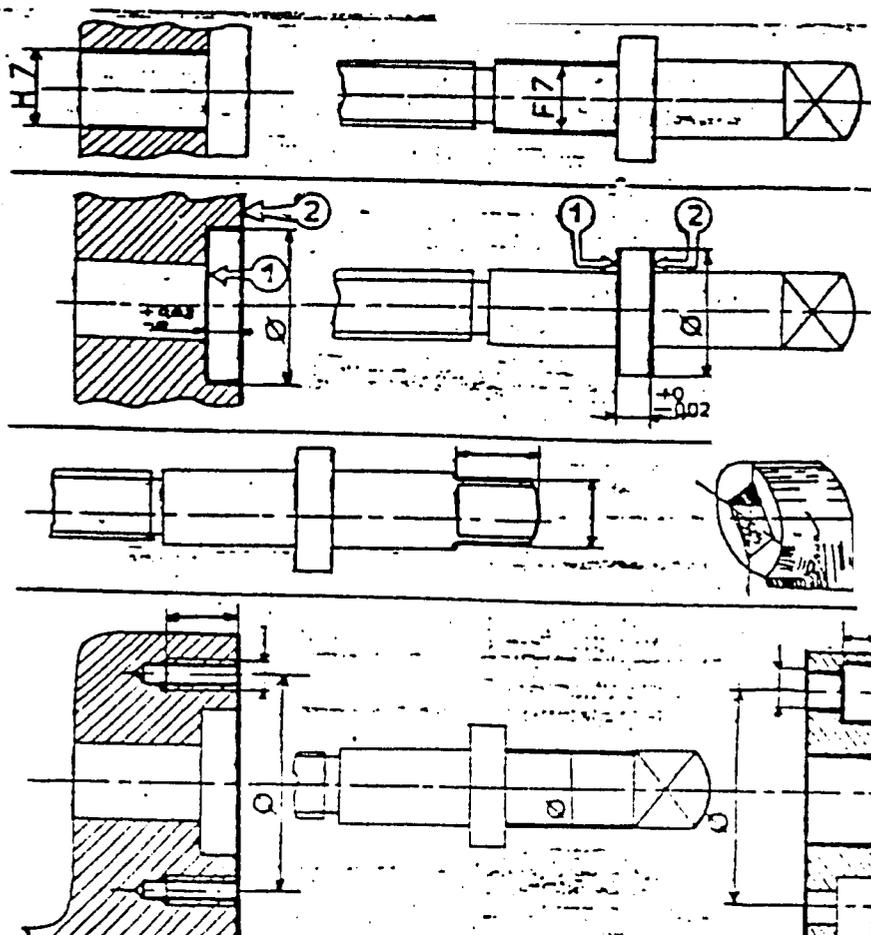


COTES FONCTIONNELLES

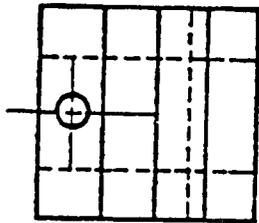
FONCTIONS	
	GUIDAGE EN ROTATION DE LA VIS
	IMMOBILISATION EN TRANSLATION DE LA VIS
	ENTRAINEMENT DE LA VIS
	MONTAGE ET DEMONTAGE POSSIBLES DE LA VIS



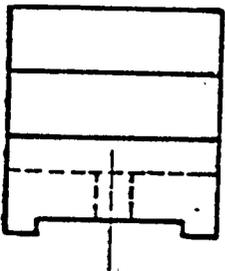
COTES FONCTIONNELLES



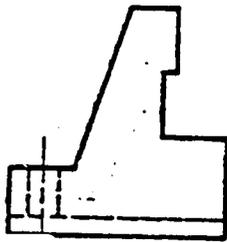
Vue  
de dessus



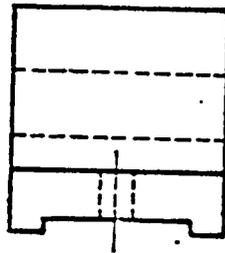
Vue  
de droite



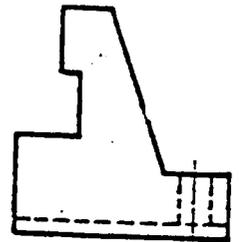
Vue  
de face



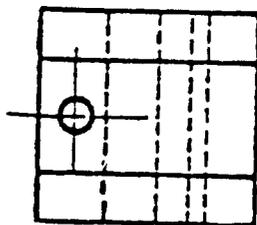
Vue  
de gauche



Vue  
d'arrière



Vue  
de dessous



OPERATION FICTIVE de sciage suivant le plan de coupe déterminé

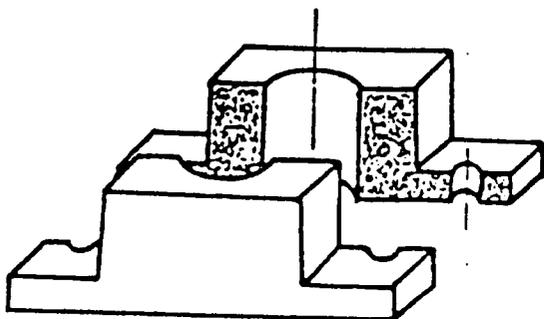


Figure 2

le plan de coupe est vertical

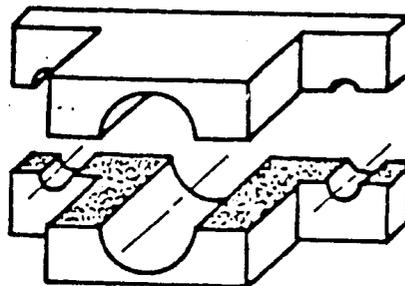


Figure 3

le plan de coupe est horizontal

SUPPRIMER mentalement la partie de la pièce située entre le plan de coupe et l'observateur (fig.4-5)

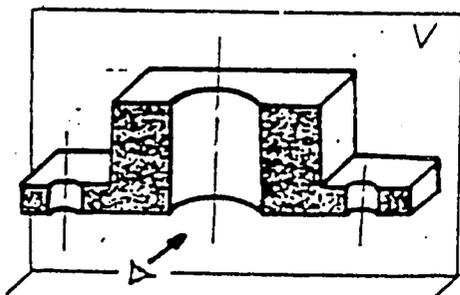


Figure 4

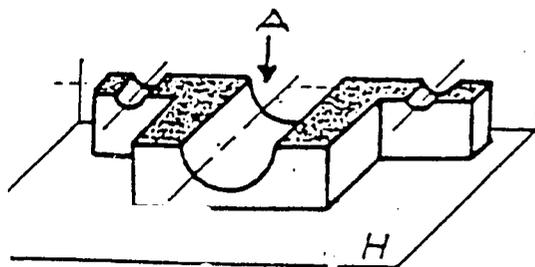


Figure 5

REPRESENTER la partie restante de la pièce partie située entre le plan de coupe et le plan V (fig.6) ou le plan H (fig.7)

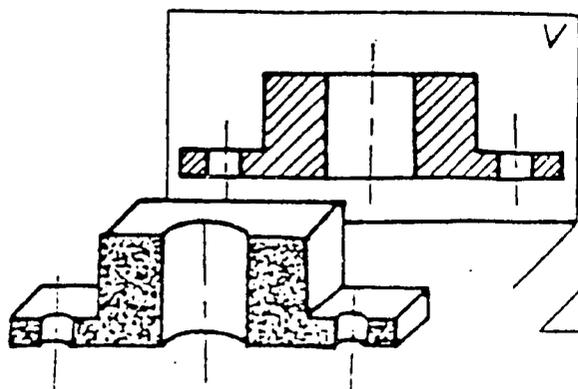


Figure 6

Représentation sur le plan vertical

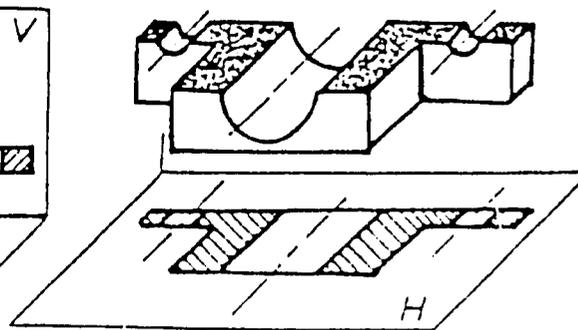


Figure 7

Représentation sur le plan horizontal

LIST OF COMPANIES TO BE CONTACTED

O.N.E. 65, rue Aspirant Lafuente B.P. 498 Casablanca	Electro Koutoubia 154, rue Dumont d'Urville Casablanca
STAR ELECT. STE Rue de Verdi Angle Saint Saens Casablanca	Sté CABELEC Bd Girardo B.P. 657 Angle rue la plage Casablanca
LA TELEPHONIE MODERNE TELMOSA 7, rond point Hassan II B.P. 5033 Casablanca	BEN OMAR 8, rue Lapébie Casablanca
SADA ELECTRONIQUE 114, Bd de la Résistance B.P. 10878 Casablanca	RUF MAROC STE 22, rue de Bethune Casablanca
R.A.D. 48, rue Md Diouri B.P. 88 Casablanca	KAUFMANN A. Ets. 151, rue Md Smiha B.P. 240 Casablanca
Electromécanique Régulation S E M R E 18, rue Clémenceau Casablanca	FENIE BROSSETTE 650, Bd Md V Casablanca
C.G.C.T. S.A. , rue Frederic Mistral Casablanca	OMNIUM TECHNIQUE MAROC 11, rue Lapébie Casablanca
Sté STAR ELEC. 65, rue Verdi Casablanca	

SOCONITRA  
82, rue Md Diouri  
Chez Colora  
Casablanca

ELECTRA  
4, rue Canisares  
Casablanca

SOCIETE SETEL  
1, route de Rabat  
Ain Sebaa  
Casablanca

Société des Travaux Publics  
7, rue Pillot  
Casablanca

Maghreb Electrique  
32, rue de Compiegne  
Casablanca

Sté Africaine des ETs E.G.B.  
47, rue de la Pyramide  
Casablanca

Ets Hubert Dolbeau et Fils  
81, rue Karatchi  
Casablanca

ROYAUME DU MAROC  
 —  
 MINISTERE DU TRAVAIL ET DE  
 LA FORMATION PROFESSIONNELLE

Office de la Formation  
 Professionnelle  
 et de la Promotion du Travail

DIRECTION GÉNÉRALE

السلطنة المغربية  
 وزارة العمل والتكوين المهني  
 مكتب التكوين  
 المهني  
 ور انعاش العمل  
 الادارة العامة

Réf. : OFP/DG/N° \_\_\_\_\_

Casablanca, le .....16 novembre 1981..... في الدار البيضاء

Monsieur le Directeur,

Nous avons le plaisir de vous informer que l'OFPPT a mis sur pied un programme spécifique de formation pour jeunes filles dans les secteurs industriel, commercial et du bâtiment (Electricité, Electronique, Dessin de Bâtiment, Dessin Industriel, Comptabilité et Secrétariat).

Ce programme vise l'intégration de la femme Marocaine dans de nouveaux secteurs de l'activité économique.

Cette action rentre dans le cadre d'un projet mené conjointement par le Gouvernement Marocain et l'Agence Américaine pour le Développement International (US/AID).

Toutes les stagiaires des spécialités sus-visées ont bénéficié d'un stage pratique d'une durée de un mois, ce qui leur a permis la découverte du monde du travail et la confrontation de la formation reçue avec les pratiques en vigueur au sein des entreprises. A l'issue de cette expérience, qui s'est avérée fructueuse, plusieurs filles ont été embauchées par les sociétés qui ont accepté de les prendre en stage.

Afin de contribuer à la réussite de ce projet et dans la mesure de vos possibilités, nous vous prions de bien vouloir examiner la possibilité d'embaucher quelques lauréates dans votre établissement.

Comptant sur votre compréhension et votre collaboration, nous vous prions d'agréer, Monsieur le Directeur, l'expression de nos sentiments distingués.

*Mr. COOWAN*  
*France*

P.V. DE LA REUNION DE COORDINATION N° 1  
(ELECTRONIQUE R. TV ET ELECT. INDUSTRIELLE)

Date : le 27/10/1981

Lieu : Salle de réunion de l'I.N.F.C.T.

ORDRE DU JOUR

- I - Avancement du programme d'électronique (R.TV et Industrielle)
- II - Divers

Etai ent présents :

MM. - MOUTTAQUI	Abdellah
- <del>GGUARE</del> <i>Coowan</i>	Féroze (A.I.D)
- ZNAIMTA	Mohamed
- LKCHIRI	Abdelouaheb
- BELLOUCHE	Ali
- BOUMEZZI	Abdellah
- ZAFACUI	Mohamed
- N'GADI	Abdelouahed
- FELLAH	Abdessalem
- LEHOUIR	Brahim
- <i>Hadjlatri</i>	<i>Abdelmajid</i>

La séance fut ouverte à 9h 30mn par Monsieur MOUTTAQUI, Chef de département électrique, qui a rappelé aux participants l'ordre de jour ci-dessus et l'importance de la collaboration entre tous les formateurs, afin d'assurer le déroulement et l'avancement du programme d'électronique dans les meilleurs conditions.

*d'électronique*

Ensuite, la parole a été accordée à chacun des formateurs pour donner un aperçu général sur le déroulement et l'avancement de son programme dans la période allant du 1 Septembre 1981 au 26/10/1981 suivant le tableau ci-dessous :

Matières	Leçons enseignées	Responsables
Technologie Générale  Electronique	<ul style="list-style-type: none"> <li>- Isolants</li> <li>- Matériaux magnétiques</li> <li>- Introduction et structure</li> <li>- Semi conducteur</li> </ul>	MR BELLOUCH Ali
Electro-Technique	<ul style="list-style-type: none"> <li>- Circuit électrique</li> <li>- Courant électrique</li> <li>- Condensateurs</li> <li>- Couplage des condensateurs (série, //)</li> <li>- Effet calorifique du courant électrique</li> </ul>	MM. BELLOUCH Ali  ZMAEMITA Mohamed
Mathématiques	<ul style="list-style-type: none"> <li>- Equations, Inéquations paramétriques de 2ème degré</li> <li>- Notions de trigonométrie</li> <li>- Applications :               <ul style="list-style-type: none"> <li>- Nombre complexe</li> <li>- Système à trois inconnus avec déterminants</li> <li>- Combinaison linéaire</li> <li>- Fonction logarithmique</li> <li>- Intégral trigonométrique</li> </ul> </li> </ul>	MR BOUMEZZI Abdellah
Schéma	<ul style="list-style-type: none"> <li>- Unités et Symboles</li> <li>- Indice de quelques grandeurs</li> <li>- Classification des dessins</li> </ul>	MM. ZAFACUI Mohamed MARGHABI Abdelmajid
Dessin Industriel	- Rien n'est fait jusqu'à présent	MM. MOUTACUAKIL BOUCADRA Mustapha
Technologie Fonctionnelle	<ul style="list-style-type: none"> <li>- Introduction (Appareils utilisés dans le laboratoire)</li> <li>- Multimètre (Ampèremètre, volt-mètre et ohmètre)</li> <li>- Bloc d'alimentation</li> <li>- Générateur de fréquence</li> <li>- Interrupteurs et circuit de commutation</li> <li>- Technologie sur la soudure à l'étain</li> </ul>	MR N'GADI

Matières	Leçons enseignées	Responsables
Technologie Fonctionnelle	<ul style="list-style-type: none"> <li>- Sécurité et précautions</li> <li>- Introductions (Appareils utilisés dans le laboratoire)</li> <li>- Multimètre électronique (Ampèremètre, voltmètre et ohmètre)</li> <li>- Bloc d'alimentation</li> <li>- Technologie sur la soudure à l'étain</li> </ul>	MR FELLAH Abdessalam
"	<ul style="list-style-type: none"> <li>- Multimètre (Ampèremètre, Voltmètre et Ohmètre)</li> <li>- Technologie sur la soudure à l'étain</li> <li>- Résistances (différentes sortes, code de couleur)</li> <li>- Condensateur (en cours)</li> </ul>	MR NAIT KHACHAT Ahmed
Enseignement Pratique général Electricité G1e	<ul style="list-style-type: none"> <li>- Introductions</li> <li>- Notions sur l'Electricité Générale</li> <li>- Montage simple allumage</li> <li>- Montage double allumage</li> <li>- Montage va et vient</li> </ul>	MR LEKCHIRI Abdelouahed
Enseignement Pratique spécifique	<ul style="list-style-type: none"> <li>- Utilisation du multimètre électronique</li> <li>- Sécurité, Source d'énergie et mesures des grandeurs électrique (A. V. )</li> <li>- Bloc d'alimentation</li> <li>- Exercices de soudure à l'étain (Réalisation sur plaquette)</li> </ul>	MR FELLAH Abdessalam
	<ul style="list-style-type: none"> <li>- Utilisation du multimètre ordinaire</li> <li>- Source d'alimentation</li> <li>- Mesures des grandeurs électriques (A. V. )</li> <li>- Bloc d'alimentation</li> <li>- Exercices de soudure à l'étain (Réalisation d'une cage)</li> </ul>	MR N'GADI Abdelouahed
	<ul style="list-style-type: none"> <li>- Utilisation du multimètre ordinaire</li> <li>- Mesures des grandeurs électriques en courant continu et en courant alternatif</li> <li>- Initiation de soudure à l'étain (Réalisation des grilles)</li> <li>- Les condensateurs (charge et décharge)</li> </ul>	MR NAIT KHACHAT Ahmed

Par ailleurs, en ce qui concerne la cohésion entre les cours pratiques et théoriques, elle n'est pas respectée pour le premier chapitre "loi d'ohm" du cours d'électrotechnique.

D'après la discussion, il s'est avéré que le chapitre ci-dessus n'est pas encore enseigné aux stagiaires.

Cela est dû à une erreur involontaire (interprétation) commise par Monsieur BELLOUCH Ali, qui s'est porté volontaire pour l'enseigner aux élèves dans une réunion de coordination en Septembre 1981.

Alors, pour compenser ce retard en matière d'électrotechnique, les assistants, ont suggéré d'allouer trois heures du temps de pratique spécifique pendant deux semaines consécutives pour chaque code.

Il a été demandé à Monsieur LAHOUIR Brahim, Instructeur d'Electricité Générale d'assurer le cours du chapitre en question et ce à partir du 3/11/1981 avec la collaboration des formateurs de travaux pratiques suivant le planning et l'emploi du temps ci-dessous :

Jours	Heure	Code	En collaboration avec M. :
Mardi 3/11/1981	8h à 11h	171	FELLAH
Mercredi 4/11/1981	8h à 11h	161	N'GADI
Judi 5/11/1981	14h à 17h	151	NAIT KHACHAT
Mardi 10/11/1981	8h à 11h	171	FELLAH
Mercredi 11/11/1981	8h à 11h	161	N'GADI
Judi 12/11/1981	8h à 11h	151	NAIT KHACHAT
Vendredi 13/11/1981	8h à 11h	141	NAIT KHACHAT
Vendredi 20/11/1981	8h à 11h	141	NAIT KHACHAT

II- Divers

Travaux dirigés

Pour une bonne acquisition et une bonne évolution des travaux dirigés d'électronique, Monsieur BELLOUCH Ali a accepté de son propre gré de prendre en surplus les deux heures des travaux dirigés du code 141, tous les Lundi de 14h à 16h, ce à partir du 15/11/1981, dans l'atelier de Monsieur NAIT KHACHAT, qui doit être présent pendant les dites heures.

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Matériel et équipement

Vu le nombre de stagiaires recrutés cette année, des réclamations ont été soulevées par la majorité des instructeurs, portant sur l'insuffisance du petit outillage, le nombre de postes de travail et le manque de la matière d'œuvre.

Il est à noter que la section d'Electronique Industrielle est dépourvue de postes de travail convenables suivant l'évolution technique actuelle.

Assiduité des stagiaires

Il est à signaler que le nombre de bons de réception (Absences injustifiées ; justifiées) est très élevé.

Remarques et Suggestions

Il a été noté qu'une heure par semaine en matière de physique s'avère insuffisante. On suggère d'allouer une heure supplémentaire à cette discipline.

Il a été constaté le manque des travaux dirigés pour le cours d'électrotechnique ;

On souhaite d'attribuer une heure au moins à ce cours.

La prochaine réunion est fixée pour le 25/11/1981 à 15h dans la salle de réunion de l'I.N.F.C.T.

La séance fût levée vers 4h 30mn.

En conclusion

Nous pensons avoir bien transmis ces données qui doivent être considérées comme un moyen de collaboration afin de bien mener la marche de cet Institut.

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## CONFERENCE REPORT

NAME OF PARTICIPANT: Malika Benimmas  
 TITLE OF CONFERENCE: American Vocational Association Annual Convention  
 "Reaching for Excellence through Vocational Education"  
 LOCATION: Atlanta, Georgia  
 DATES ATTENDED: December 4 - December 8, 1981

## A. PLEASE DESCRIBE THE ACTIVITIES/SESSIONS YOU PARTICIPATED IN:

- Friday, Dec. 4
- Registration
  - Visit to a school north of Atlanta
- Saturday, Dec. 5
- General Session on "Problems and Issues in Vocational Education."
  - Vocational Education Equity Council session on "Joining Forces - Increasing through VEEC/AIAA Cooperative Effort."
  - Session on Keying T&I Programs to Occupations for Planning, Placement & Curriculum Development."
- Sunday, Dec. 6
- Innovations in Program Development.
  - Transfer of Technology.
  - Role of Vocational Education in the Reindustrialization of America.
  - Decision Sciences.
- Monday, Dec. 7
- Staff Development
  - Linkages to Promote Program Improvement.
  - Fitting the Pieces of Program Improvement Together.
  - Qualitative Methods for Improving Program Evaluation in Vocational Education.
- Tuesday, Dec. 8
- Administration Division Session on "Systems Approach to Staff Development."
  - Research Section Session on Equity and Special Populations Research.

## B. HOW WILL THE KNOWLEDGE ACQUIRED AT THIS CONFERENCE HELP YOU IN YOUR STUDIES/FUTURE WORK?

What I learned at the AVA Annual Conference made me more aware of the importance of vocational education and the extent of its interactions with other fields. I acquired a more practical and global view on vocational education than what is offered to me in the classroom. That is helping me in identifying my needs of learning on certain topics or areas essential to my future work.

I feel I learned a great deal of things I can use in my future work, and I acquired a certain sensitivity to problems and issues in vocational education that will help me perform well in my future job.

## CONFERENCE REPORT

NAME OF PARTICIPANT: Nadia Chihani  
 TITLE OF CONFERENCE: American Vocational Association Annual Convention  
 "Reaching for Excellence through Vocational Education"  
 LOCATION: Atlanta, Georgia  
 DATES ATTENDED: December 4 - December 8, 1981

## A. PLEASE DESCRIBE THE ACTIVITIES/SESSIONS YOU PARTICIPATED IN:

1. "Problems & Issues in Vocational Education" by Gene Bottoms, Executive Director of the American Vocational Association. Dealt with how Voc. Educ. should be strengthened at federal level and how forces should be strengthened to work with disadvantaged youth, to help a poor community.
2. "Expanding a Sex Equity Model to Other Equity Issues" by Charlotte Farris, Director of Project MOVE, SUNY College of Technology, NY.  
 "Workshop in Eliminating Sex Stereotyping through Industrial Arts and Home Economics," by Michael Adams and Charlotte Farris. Presented rationale for the problem which is Industrial Arts (I.A.) thought to be for boys only and Home Economics (H.E.) for girls and obstacles to the implementation of co-educational programs in I.A. and H.E. Focused on how discrimination occurs first through biases and then through stereotyping.
3. "Competency Based Education" by Gladys Renick, from Gateway Technical Institute, Kenosha, WI. Presented how Gateway used competencies defined by tasks to teach students and adults that are coming back to school.
4. "Developing Effective Oral Communication " by Edwin Windener, from Gateway Technical Institute, Kenosha, WI. Discussed how to make our future workers (who are the graduates from the technical schools) communicate effectively with their employers and co-workers.
5. "Instructional Materials Should Address More than Skills" by P. Gray, R. Gusterson and R. Rassen. Urged changes in behaviors and attitudes of students in their concern about the future (example: energy needs, effects of inflation, etc.)
6. " Industrial Arts at the Crossroads" by D. Maley, Professor, Industrial Education Department, College of Education, University of Maryland.
7. "Linking the School and Community - Dropout Prevention" by Jan Novak and B. Dougherty from the Vocational Studies Center, University of Wisconsin/Madison. Proposed a guidance program for staff training and dropout prevention.

Nadia Chihani

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8. "Designing and Utilizing Instruments to evaluate the effectiveness of Vocational Programs" by S. Seu, R. Patton, C.J. Schaeffer and S. Whitener.
  9. "Role and Scope of Advisory Committees" by B.J. Ledford, Assistant Professor, Trade and Industrial/Vocational Technical Education, Memphis State University. Identify what Advisory Committees' functions should be, and the long and short range goals to be reached through the cooperation between community and Advisory Committees.
  10. "Advisory Committees: How They Should be Utilized and How to Evaluate Their Effectiveness" by S.L. Van Ausdle, Administrative Dean, Walla Walla Community College - Dealt with why and how Advisory Committees should be utilized and how to evaluate and how to increase their effectiveness.
  11. "System Approach to Staff Development" by Hona Tomasek, Staff Development Specialist, Bear Lake, Minnesota.
  12. "Techniques for Researching Trends in Vocational Teacher Education."
    - "Using a Year Long Internship for Preparing Vocational Teachers" by John Thompson, Professor and Chairman, Department of Continuing and Vocational Education, University of Wisconsin, Madison.
    - "Using Performance Based Programs for Preparing Vocational Teachers." by J.B. Hamilton, Senior Research Specialist, National Center for Vocational Education, Ohio State University.
    - "Using Reflective Teaching to prepare Vocational Teachers." by Jerry Peters, Assistant Professor, Agricultural Education, Purdue University, Indiana.
- B. HOW WILL THE KNOWLEDGE ACQUIRED AT THIS CONFERENCE HELP YOU IN YOUR STUDIES/FUTURE WORK?

Because the different sessions attended touched on a large variety of topics, they help broaden our ideas and realize problems that exist beyond the theories learned in the academic domain.

The content of the conference allowed our involvement in concerns of people that are already working in and for Vocational Education.

We would eventually consider the implementation of the ideas and examples acquired in practice.

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## CONFERENCE REPORT

Name of Participant: Cherkaoui Lalla Mouna  
 Title of Conference: Allied Social Science Associations  
 Location : Washington, D.C.  
 Dates Attended : December 28-30, 1981

1. The Allied Social Science Associations meeting was held at Washington D.C. December 28-30, 1981 at the Washington Hilton Hotel. The meeting was productive and enjoyable.

The Sessions were offered three (3) times a day at 8:00 a.m., 10:15 a.m., and 2:00 p.m.

There were about ten different topics offered at each of these different times of the day. The sessions were so interesting that it was difficult to decide which one to go to.

We will briefly enumerate the topics of each session and mention the speakers.

Monday December 28, 1981.

8:00 a.m. - Government Economic Policy Assessment:  
The Labor Market.

The papers were presented by Orley C. Ashenfelter, Daniel B. Hamermesh and Richard B. Freeman. The discussants were Joel Segal and Isabel V. Sawhil.

10:15 a.m. - Recent Developments in Macroeconomic Theory: Implications for Government's Role.

The papers were presented by Edmund S. Phelps, Thomas J. Sargent and Pentti J.K. Kouri. The discussants were George L. Perry and Alan S. Blinder.

2:00 p.m. - Reliability and Replication in Applied Economic Research: A Symposium.

The speakers were Karl Brunner, Vernon L. Smith, James J. Heckman, Robert J. Gordon, Lawrence R. Klein, Jacob Frenkel, Zui Grilches

Tuesday December 29, 1981.

8:00 a.m. - Microeconomics Reconsidered.

The papers were written by Harvey Leibenstein, Richard P. Nathan, Ruth P. Mack. The discussants were Peter Rossi and Richard G. Cyert.

10:15 a.m. - Financial Markets, the Monetary Mechanism and Monetary Policy.

The papers were presented by Benjamin M. Friedman, Franco Modigliani and Lucas Papademos, Anthony M. Santomero and Jeremy J. Siegel and Dale W. Henderson. The discussants were Stanley W. Black, Phillip Cagan, Christopher A. Sims and James L. Pierce.

2:00 p.m. - Monetary and Exchange Rates.

The papers were presented by Michael Connolly, Michael R. Darby and Alan C. Stockman. The discussants were Anthony M. Lanyi and Michael T. Melvin.

Wednesday December 30, 1981.

8:00 a.m. - Disequilibrium Analysis for Developing Economics.

The speakers were Bela Balassa, Maxwell J. Fry, Anne O. Krueger and Vito Tanzi. The discussants were Roy Bahl and Ronald I. McKinnon.

On Tuesday December 29, I went to the AEA Luncheon honoring the 1980 Nobel Laureate Lawrence R. Klein.

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2. The sessions were very helpful and directly related to my field study.

They contributed in extending my knowledge on the different subjects. It also helped me to realize how much I understood from my class work and how it is applicable to real world problems.

The discussions very often were very related to real world phenomena while my classes are mainly theoretical in content.

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## CONFERENCE REPORT

NAME OF PARTICIPANT: Rouhel Kouloub El Hajoui  
 TITLE OF CONFERENCE: American Psychological Association 89th  
 Annual Convention  
 LOCATION: Los Angeles, California  
 DATES ATTENDED: August 24 - 28, 1981

## A. PLEASE DESCRIBE THE ACTIVITIES/SESSIONS YOU PARTICIPATED IN:

- 1) Monday, 24. Paper: "Women: Working Problems and Aging"  
 Achievement orientation, attainment values, and women's employment
  - the impact of work on women at midlife
  - professional work alienation

Symposium: "Cross-Cultural Treatment Approaches in Psychotherapy with Women"

Executive Committee Meeting Discussions and Exchange of Points of Views
- 2) Tuesday, 25. Paper & Discussion: "Measurement of Educational Constructs"
  - Investigating construct validity of educational tests
  - Minority panel review in the development of an achievement test

Symposium: "Applications of Self-Efficacy Theory to Women's Development"

Paper: "Quantitative Approaches to the Study of Age and Intelligence"

Symposium: "Feminist Issues in Urban Communities"
- 3) Wednesday, 26. Symposium: "Reducing Occupational Sex Segregation;  
 Encouraging Non-traditional Career Choice by Adolescents"

Symposium: "Psychological Perspectives of Career Development with Special Populations"

  - Career development of Schizophrenic Clients
  - Improving Employment Opportunities for Persons with Disabilities

Paper & Discussion: "Motivation and Expectancy in Education"

Symposium: "New Clinical Applications of Cognitive Therapy"
- 4) Thursday, 27. Symposium: "Models for Training Counselors of Women"

Symposium: "Models for Intervention with Parents: The School Psychologist's Expanding Role"

Open Meeting: "Future Issues of the Counseling Psychologist"

Symposium: "Development of Structural Sex Differences in the Brain"

Round Table Discussion: "As the Person-Centered Approach Moves into 1980s"  
 with Carl Rogers

Kouloub El Hajoui

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## Invited Address

Open Meeting: Committee on Women

5) Friday, 28. Symposium: "Individual Assessment for Career Planning"

Symposium: "Family Involvement in School-Based Intervention for the Child"

Symposium: "Contemporary Women in the History of Psychology"

B. HOW WILL THE KNOWLEDGE ACQUIRED AT THIS CONFERENCE HELP YOU IN YOUR STUDIES/  
FUTURE WORK?

The 89th Annual Convention was devoted to an exploration of new developments in psychotherapy research and behavior change. The conferences focused on variable relationship in psychotherapy, research on human change processes, advances in research methodology, and the impact of factors such as race, class and sex.

Thanks to this convention, I learned a lot about the recent studies and explorations in Psychology. Also, the knowledge acquired at this conference will help me very much in my studies, especially in career counseling. In addition, I met well-known psychologists such as Rogers, Glasser... It was very interesting.

The things that I learned will help me in my future work, so I am glad I was there.

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