

# Management Tools Workshop Module 1

1. Overview of Navigator system.

2. GRiDWRITE text editor.

3. Subject and title commands.



4. GRiDPLAN worksheet editor.



- Using a worksheet

- Creating a worksheet

# Worksheet Example

## - Furniture Division Forecast -

FURNITURE DIVISION			FURNITURE DIVISION									Total
-ASSUME- Growth			<-----Actual----->			<-----Forecast----->		Forecast				
			Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	
1.03	UNITS	Chairs	38	64	64	60	62	64	66	68	70	554
0.98	SOLDS	Desks	46	55	55	60	59	58	56	55	54	498
1.05		Lamp	78	92	92	100	105	110	116	122	128	942
Price \$												
75.00	REVENUE	Chairs	2850.00	4800.00	4800.00	4500.00	4635.00	4774.05	4917.27	5064.79	5216.73	41558
135.00		Desks	6210.00	7425.00	7425.00	8100.00	7938.00	7779.24	7623.66	7471.18	7321.76	67294
28.00		Lamps	2184.00	2576.00	2576.00	2800.00	2940.00	3087.00	3087.00	3241.35	3403.42	25895
Cost \$												
25.00	COST	Chairs	950.00	1600.00	1600.00	1500.00	1545.00	1591.35	1639.09	1688.26	1738.91	13853
39.69		Desks	1825.74	2182.95	2182.95	2381.40	2333.77	2287.10	2241.35	2196.53	2152.60	19784
6.93		Lamps	540.54	637.56	637.56	693.00	727.65	764.03	802.23	842.35	884.46	6529
PROFIT \$												
		Chairs	1900.00	3200.00	3200.00	3000.00	3090.00	3182.70	3278.18	3376.53	3477.82	27705
		Desks	4384.26	5242.05	5242.05	5718.60	5604.23	5492.14	5382.30	5274.65	5169.16	47509
		Lamps	1643.46	1938.44	1938.44	2107.00	2212.35	2322.97	2284.77	2399.00	2518.95	19365
	TOTAL...		7927.72	10380.49	10380.49	10825.60	10906.58	10997.81	10945.25	11050.19	10906.58	94321



# Retrieve Existing Worksheet

19-Oct-82		4:46 pm
Workshop		
Titles	Kind	Medium
backup	Worksheet	BubbleMemory
Employee histories	Database	BubbleMemory
<b>Furniture Div: Forecast</b>	Worksheet	BubbleMemory
Memo	Text	BubbleMemory
Trip Report	Text	BubbleMemory

3

Outline title "Furniture Div: Forecast"

4

CONFIRM

# Cell Coordinates

row letters

column numbers

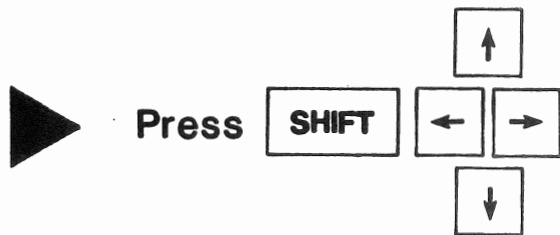


	A	B	C	D	E
1	FORNITURE	DIVISION			
2				<-----	-Actual-
3	-ASSUME-			Jan	Feb
4	Growth				
5	1.03	UNITS	Chairs	38	64
6	0.98	SOLDS	Desks	46	55
7	1.05		Lamp	78	92
8	Price \$				
9	75.00	REVENUE	Chairs	2850.00	4800.00
10	135.00		Desks	6210.00	7425.00
11	28.00		Lamps	2184.00	2576.00
12	Cost \$				
13	25.00	COST	Chairs	950.00	1600.00
14	39.69		Desks	1825.74	2182.95
15	6.93		Lamps	540.54	637.56

A1

current cell

# Viewing the Worksheet

	A	B	C	D	E		FURNITURE	DIVISION	
1	FURNITURE	DIVISION							
2				<-----	-Actual-	----->	<-----	Forecast	-----
3	-ASSUME-			Jan	Feb	Mar	Apr	May	Jun
4	Growth								
5	1.03	UNITS	Chairs	38	64	64	60	62	64
6	0.98	SOLDS	Desks	46	55	55	60	59	58
7	1.05		Lamp	78	92	92	100	105	110
8	Price \$								
9	75.00	REVENUE	Chairs	2850.00	4800.00	4800.00	4500.00	4635.00	4774.05
10	135.00		Desks	6210.00	7425.00	7425.00	8100.00	7938.00	7779.24
11	28.00		Lamps	2184.00	2576.00	2576.00	2800.00	2940.00	3087.00
12	Cost \$								
13	25.00	COST	Chairs	950.00	1600.00	1600.00	1500.00	1545.00	1591.35
14	39.69		Desks	1825.74	2182.95	2182.95	2381.40	2333.77	2287.10
15	6.93		Lamps	540.54	637.56	637.56	693.00	727.65	764.03
		PROFIT \$	Chairs	1900.00	3200.00	3200.00	3000.00	3090.00	3182.70
			Desks	4384.26	5242.05	5242.05	5718.60	5604.23	5492.14
			Lamps	1643.46	1938.44	1938.44	2107.00	2212.35	2322.97
		TOTAL...		7927.72	10380.49	10380.49	10825.60	10906.58	10997.81


 Press **SHIFT**   to move outline one cell at a time.

# Cell Contents

label

number

	B	C	D	E	F
5	UNITS	Chairs	38	64	64
6	SOLDS	Desks	46	55	55
7		Lamp	78	92	92
8					
9	REVENUE	Chairs	2850.00	4800.00	4800.00
10		Desks	6210.00	7425.00	7425.00
11		Lamps	2184.00	2576.00	2576.00
12					
13	COST	Chairs	950.00	1600.00	1600.00
14		Desks	1825.74	2182.95	2182.95
15		Lamps	540.54	637.56	637.56
16					
17	PROFIT	\$ Chairs	1900.00	3200.00	3200.00
18		\$ Desks	4384.26	5242.05	5242.05
19		\$ Lamps	1643.46	1938.44	1938.44

D17= D9-D13

cell definition

# "What - If Analysis "

?



What will my profits look like if I charge \$20 more per chair?

1. Change unit price.
2. Recalculate worksheet.

# Recalculating Worksheet

price/chair



	A	B	C	D	E
8	Price \$				
9	95.00	REVENUE	Chairs	2850.00	4800.00
10	135.00		Desks	6210.00	7425.00
11	28.00		Lamps	2184.00	2576.00
12	Cost \$				
13	25.00	COST	Chairs	950.00	1600.00
14	39.69		Desks	1825.74	2182.95
15	6.93		Lamps	540.54	637.56
16					
17		PROFIT	\$ Chairs	1900.00	3200.00
18			\$ Desks	4384.26	5242.05
19			\$ Lamps	1643.46	1938.44
20					
21			TOTAL...	7927.72	10380.49
22					

A9

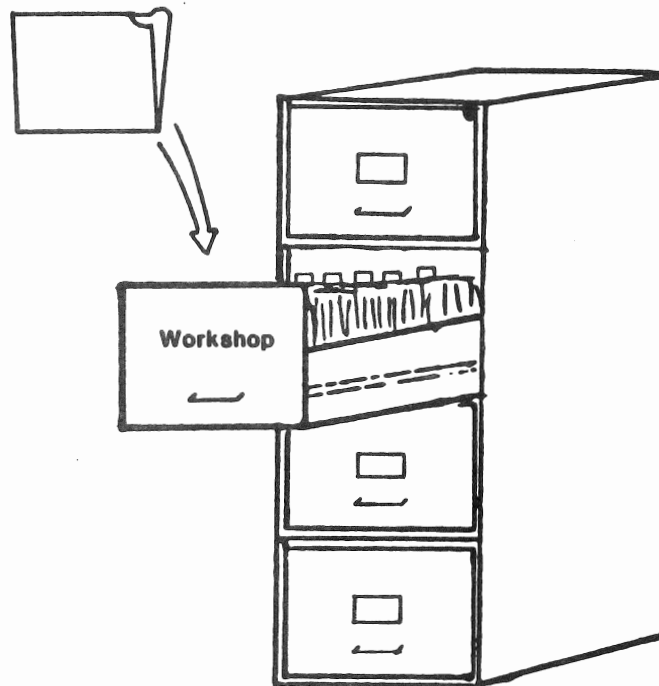
1

Change price/chair to \$95.00.

2

CONFIRM (recalculates worksheets)

# Quit Command



**1** Press **CODE** **Q** to start the Quit command.

**2** CONFIRM

# Management Tools Workshop Module 1

1. Overview of Navigator system.

2. GRIDWRITE text editor.

3. Subject and title commands.



4. GRIDPLAN worksheet editor.

- Using a worksheet



- Creating a worksheet

# Worksheet you will create

	A	B	C	D	E
1		JAN	FEB	MAR	APR
2	PRODUCT				
3					
4	VANS	37.90	41.69	45.86	50.44
5	TRUCKS	88.76	106.51	127.81	153.38
6	SEDANS	127.11	120.75	114.72	108.98
7	USED	61.21	70.39	80.95	93.09
8					
9	TOTAL	314.98	339.35	369.34	405.90
10					
11					
12					
13					
14					
15					

E14

$$C4=1.1*B4$$

$$C5=1.2*B5$$

$$C6=0.95*B6$$

$$C7=1.15*B7$$

$$C9=Sum(C4..C7)$$

$$D4=1.1*C4$$

$$D5=1.2*C5$$

$$D6=0.95*C6$$

$$D7=1.15*C7$$

$$D9=Sum(D4..D7)$$

$$E4=1.1*D4$$

$$E5=1.2*D5$$

$$E6=0.95*D6$$

$$E7=1.15*D7$$

$$E9=Sum(E4..E7)$$

# Exercise

1

Create a new worksheet file.

Place the file in the subject "Workshop" and give it the title "District 4 Forecast".

Subject	Workshop
Title	District 4 Forecast
Kind	Worksheet
Medium	BubbleMemory

New: Fill in form

2

Retrieve the new worksheet file.

## Exercise cont.

	A	B	C	D	E
1		JAN	FEB	MAR	APR
2	PRODUCT				
3					
4	VANS	37.90			
5	TRUCKS	88.76			
6	SEDANS	127.11			
7	USED	61.21			
8					
9	TOTAL				
10					
11					
12					
13					
14					
15					

C4

3

Enter numbers and labels into the new worksheet as shown.

## Creating a Cell Definition

	A	B	C	D	E
1		JAN	FEB	MAR	APR
2	PRODUCT				
3					
4	VANS	37.90			
5	TRUCKS	88.76			
6	SEDANS	127.11			
7	USED	61.21			
8					
9	TOTAL				
10					
11					
12					
13					
14					
15					

C4=▲

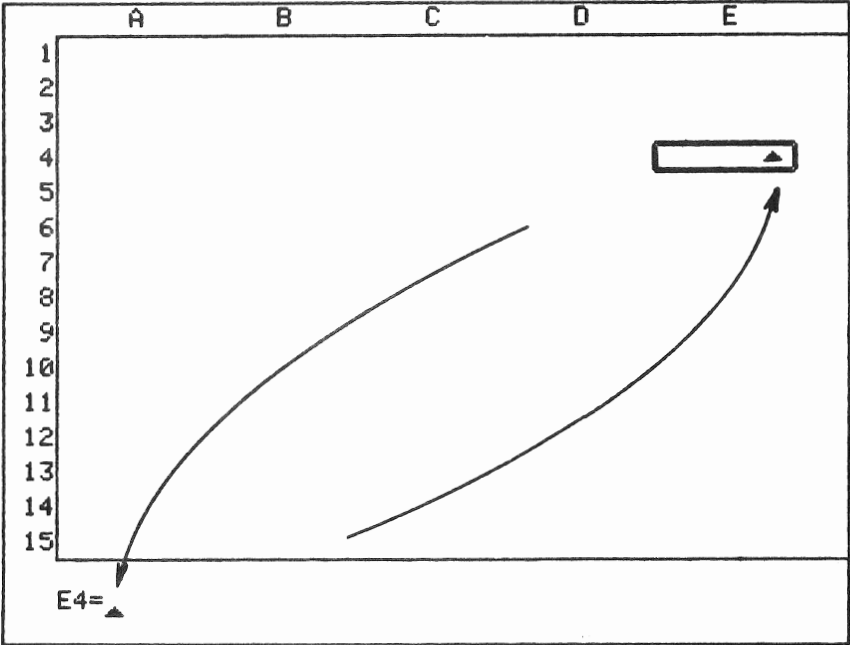
1

Place the outline in cell C4.

2

Press **CODE** **=** to move cursor to cell definition area.

# Cursor Placement



Press **ESC**

Press **CODE** **=**

# Cell Definition

	A	B	C	D	E
1		JAN	FEB	MAR	APR
2	PRODUCT				
3					
4	VANS	37.90	41.69		
5	TRUCKS	88.76			
6	SEDANS	127.11			
7	USED	61.21			
8					
9	TOTAL				
10					
11					
12					
13					
14					
15					

C4= 1.1\*B4

1

Type definition.

2

Press  to move outline to next cell.

## Cell Definitions

	A	B	C	D	E
1		JAN	FEB	MAR	APR
2	PRODUCT				
3					
4	VANS	37.90	41.69		
5	TRUCKS	98.76	106.51		
6	SEDANS	127.11	120.75		
7	USED	61.21	70.39		
8					
9	TOTAL				
10					
11					
12					
13					
14					
15					

C7= 1.15\*B7

$$C5 = 1.2 * B5$$

$$C6 = 0.95 * B6$$

$$C7 = 1.15 * B7$$



Enter three more cell definitions to complete FEB column.

# Duplicate Command

- Duplicate February column into March -

	A	B	C	D	E
1		JAN	FEB	MAR	APR
2	PRODUCT				
3					
4	VANS	37.90	41.65		
5	TRUCKS	88.76	106.51		
6	SEDANS	127.11	120.75		
7	USED	61.21	70.39		
8					
9	TOTAL				
10					
11					
12					
13					
14					
15					

C4= 1.1#B4  
Duplicate: Make a selection



Place outline at cell C4.



Press

CODE

D

# Duplicate Command

	A	B	C	D	E
1		JAN	FEB	MAR	APR
2	PRODUCT				
3					
4	VANS	37.90	41.69		
5	TRUCKS	88.76	106.51		
6	SEDANS	127.11	120.75		
7	USED	61.21	70.35		
8					
9	TOTAL				
10					
11					
12					
13					
14					
15					

C7= 1.15\*B7  
Duplicate: Make a selection

3

Press  to select cells to duplicate.

# Duplicate Command

Destination outline

	A	B	C	D	E
1		JAN	FEB	MAR	APR
2	PRODUCT				
3					
4	VANS	37.90	41.69		
5	TRUCKS	88.76	106.51		
6	SEDANS	127.11	120.75		
7	USED	61.21	70.39		
8					
9	TOTAL				
10					
11					
12					
13					
14					
15					

C7= 1.15\*B7  
Duplicate: Point to destination



CONFIRM

# Duplicate Command

	A	B	C	D	E
1		JAN	FEB	MAR	APR
2	PRODUCT				
3					
4	VANS	37.90	41.69		
5	TRUCKS	88.76	106.51		
6	SEDANS	127.11	120.75		
7	USED	61.21	70.39		
8					
9	TOTAL				
10					
11					
12					
13					
14					
15					

D4 Duplicate: Point to destination

*Perkins page 22*

5 Press    keys to position destination outline.

6 CONFIRM

# Duplicate Command

- Relative vs. Fixed References -

<b>Relative</b> Fixed
Highlighted cell reference is <input type="text" value="Relative"/>
C4= 1.1*B4
Duplicate: Fill in form

Relative



$$D4 = 1.1 * C4$$

Fixed



$$D4 = 1.1 * B4$$



**CONFIRM** all references as relative.

# Exercise



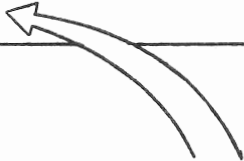
Using the Duplicate command,

duplicate the March column into the April column.

# Sum Function

	A	B	C	D	E
1		JAN	FEB	MAR	APR
2	PRODUCT				
3					
4	VANS	37.90	41.69	45.86	50.44
5	TRUCKS	88.76	106.51	127.81	153.38
6	SEDANS	127.11	120.75	114.72	108.98
7	USED	61.21	70.39	80.95	93.09
8					
9	TOTAL				
10					
11					
12					
13					
14					
15					

B9=▲



**B9 = Sum(B4..B7)**



Enter sum definition for cell B9.

## Duplicate with Multiple Destinations

	A	B	C	D	E
1		JAN	FEB	MAR	APR
2	PRODUCT				
3					
4	VANS	37.90	41.69	45.86	50.44
5	TRUCKS	88.76	106.51	127.81	153.38
6	SEDANS	127.11	120.75	114.72	108.98
7	USED	61.21	70.39	80.95	93.09
8					
9	TOTAL	314.98			
10					
11					
12					
13					
14					
15					

B9= Sum(B4..B7)  
Duplicate: Point to destination

1

Place outline on cell B9.

2

Press

3

CONFIRM

## Duplicate with Multiple Destinations

	A	B	C	D	E
1		JAN	FEB	MAR	APR
2	PRODUCT				
3					
4	VANS	37.90	41.69	45.86	50.44
5	TRUCKS	88.76	106.51	127.81	153.38
6	SEDANS	127.11	120.75	114.72	108.98
7	USED	61.21	70.39	80.95	93.09
8					
9	TOTAL	314.98			
10					
11					
12					
13					
14					
15					

C9  
Duplicate: Point to destination

4

Press  to outline beginning of destination.

5

Press   to mark beginning of destination.

## Duplicate with Multiple Destinations

	A	B	C	D	E
1		JAN	FEB	MAR	APR
2	PRODUCT				
3					
4	VANS	37.90	41.69	45.86	50.44
5	TRUCKS	88.76	106.51	127.81	153.38
6	SEDANS	127.11	120.75	114.72	108.98
7	USED	61.21	70.39	80.95	93.09
8					
9	TOTAL	314.98			
10					
11					
12					
13					
14					
15					

E9  
Duplicate: Point to destination

6

Press  to outline entire destination.

7

CONFIRM

# Duplicate with Multiple Destinations

8

CONFIRM

Relative	Fixed
Highlighted cell reference is <input type="text" value="Relative"/>	
B9= Sum( <del>B4</del> ..B7)	
Duplicate: Fill in form	

9

CONFIRM

Relative	Fixed
Highlighted cell reference is <input type="text" value="Relative"/>	
B9= Sum(B4.. <del>B7</del> )	
Duplicate: Fill in form	

	A	B	C	D	E
1		JAN	FEB	MAR	APR
2	PRODUCT				
3					
4	VANS	37.90	41.69	45.86	50.44
5	TRUCKS	88.76	106.51	127.81	153.38
6	SEDANS	127.11	120.75	114.72	108.98
7	USED	61.21	70.39	80.95	93.09
8					
9	TOTAL	314.98	339.35	369.34	405.90
10					
11					
12					
13					
14					
15					

E9= Sum(E4..E7)

# GRiDPLAN Commands Menu

	A	B	C	D	E
1		JAN	FEB	MAR	APR
2	PRODUCT				

CODE-D	Duplicate
CODE-E	Erase
CODE-I	Insert
CODE-J	Jump
CODE-M	Move
→ CODE-O	Options
CODE-P	Properties
CODE-Q	Quit
CODE-T	Transfer
CODE-U	Usage
CODE==	Definition
CODE-ESC	Cancel
CODE-RETURN	Recalculate

Commands: Select item  
Version 0.6.2 of GRiDPLAN

1

Press **CODE** **?** to display commands menu.

2

Press **CODE** **O** to display options form.

# Options Form

Left	Center	<b>Right</b>
Standard Alignment	<input type="text" value="Right"/>	
Standard Format	\$	
Standard Column Width	8	
Show Grid?	Yes	
Evaluation Order	By Rows	
Precision	15-digit Real	
Options: Fill in form		



left	center	right
1.00	1.00	1.00
22.34	22.34	22.34
98.64	98.64	98.64

*Integer Scientific*

<input type="checkbox"/>	<b>Decimal Places</b>	<input type="checkbox"/>	<b>Integer</b>	<input checked="" type="checkbox"/>	<b>Scientific</b>
Standard Alignment	Right				
Standard Format	<input type="text" value="\$"/>				
Standard Column Width	8				



Decimal	Integer	\$
3.141592	3	3.14

Standard Alignment	Right
Standard Format	\$
Standard Column Width	<input type="text" value="8"/>



	A	B	C	D	E	F
1	1	2	3	4	5	6
2						
3						
4						

# Options Command vs. Properties Command

*Wahl*

## Options Command

*betrifft*

### **Affects:**

*alles*

**entire worksheet**

*auswahl*

## Properties Command

### **Affects:**

**row**

**column**

**individual cells**

# Properties Command

	A	B	C	D	E
1		JAN	FEB	MAR	APR
2	PRODUCT				
3					
4	VANS	37.90	41.69	45.86	50.44
5	TRUCKS	89.76	106.51	127.81	153.38
6	SEDANS	127.11	120.75	114.72	108.98
7	USED	61.21	70.39	80.95	93.09
8					
9	TOTAL	314.98	339.35	369.34	405.90
10					
11					
12					
13					
14					
15					

A1  
Properties: Make a cell selection

1

Place outline in top row.


2

Press **CODE** **P** to start properties command.

# Making a Cell Selection

**CODE** **R**

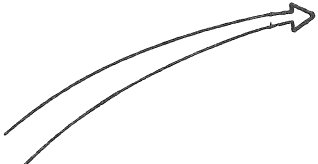
selects entire row



	A	B	C	D	E
1		JAN	FEB	MAR	APR
2	PRODUCT				
3					
4					50.44

**CODE** **C**

selects entire column



	A	B	C	D	E
1		JAN	FEB	MAR	APR
2	PRODUCT				
3					
4	VANS	37.90	41.69	45.86	50.44
5	TRUCKS	88.76	106.51	127.81	153.38
6	SEDANS	127.11	120.75	114.72	108.98
7	USED	61.21	70.39	80.95	93.09
8					
9	TOTAL	314.98	339.35	369.34	405.90
10					
11					
12					
13					
14					
15					

A1  
Properties: Make a cell selection

# Properties Command

	A	B	C	D	E
1		JAN	FEB	MAR	APR
2	PRODUCT				
3					
4	UANS	37.90	41.69	45.86	50.44
5	TRUCKS	88.76	106.51	127.81	153.38
6	SEDANS	127.11	120.75	114.72	108.98
7	USED	61.21	70.39	80.95	93.09
8					
9	TOTAL	314.98	339.35	369.34	405.90
10					
11					
12					
13					
14					
15					

A1  
Properties: Make a call selection

3

Press

CODE

C

4

CONFIRM

# Properties Form

5

Choose center alignment

*highlight*

Left	<b>Center</b>	Right	Standard	Don't Change
Alignment	<input type="text" value="Center"/>			
Format	Don't Change			
Column Width	Standard			
Properties: Fill in form				

6

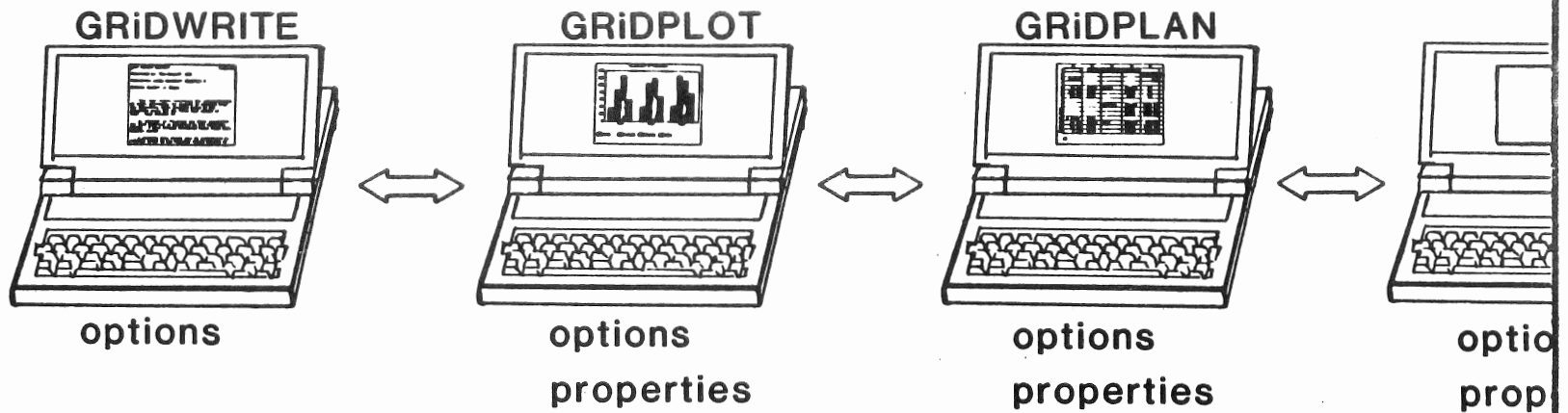
Set column width to 10

<b>No. of Characters</b>	Standard	Don't Change
Alignment	Center	
Format	Don't Change	
Column Width	<input type="text" value="10"/>	
Properties: Fill in form		

7

CONFIRM

# Options and Properties Commands



Options  entire file

Properties  cell, row, column

## Exercise



Using the `properties` command, center the month names in row 1.

# Transfer Command

	A	B	C	D	E
1		JAN	FEB	MAR	APR
2	PRODUCT				
3					
4	VANS	37.90	41.69	45.86	50.44
5	TRUCKS	88.76	106.51	127.81	153.38
6	SEDANS	127.11	120.75	114.72	108.98
7	USED	61.21	70.39	80.95	93.09
8					
9	TOTAL	314.98	339.35	369.34	405.90

Save this worksheet  
Exchange for another worksheet  
Include a file  
Write to a file  
Append to a file  
Print this worksheet  
Print definitions

Transfer: Select item

1

Press

CODE

T

2

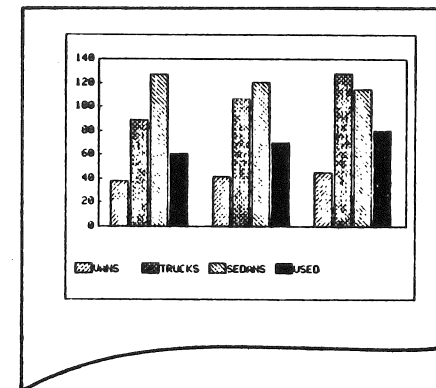
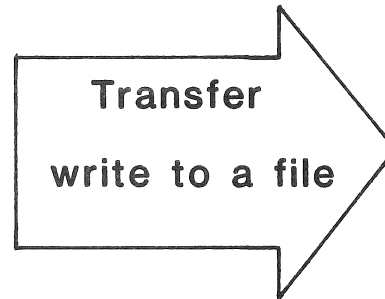
CONFIRM to save worksheet.

# Creating a Graph File

	A	B	C	D	E
		JAN	FEB	MAR	APR
1	PRODUCT				
2					
3					
4	WNS	37 96	41 69	45 86	50 44
5	TRUCKS	88 76	106 51	127 81	153 38
6	SEDANS	127 11	120 75	114 72	108 98
7	USED	61 21	78 39	88 95	93 89
8					
9	TOTAL	314 96	339 35	369 34	405 28
10					
11					
12					
13					
14					
15					

E9= Sum E4 E7>

Kind worksheet



Kind graph

- To graph data in worksheet write the worksheet data to a new file of kind "Graph".

# Exercise

- Create a file of kind graph which contains the same data as the worksheet "District 4 Forecast".

- 1 Retrieve the worksheet file.
- 2 Start the transfer command.
- 3 Select "Write to a file"
- 4 CONFIRM to write whole worksheet
- 5 fill in destination form

Subject	Workshop
Title	District 4 Forecast
Kind	<input type="text" value="Graph"/>
Medium	BubbleMemory

Write: Fill in form

- 6 CONFIRM

- After creating the graph file, exit GRIDPLAN with the Quit command.