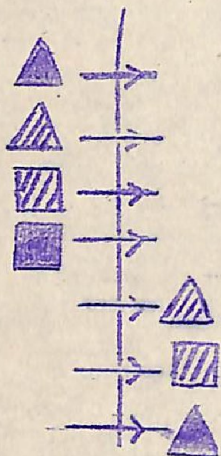


Máquinas que transformam objetos

Usaremos:

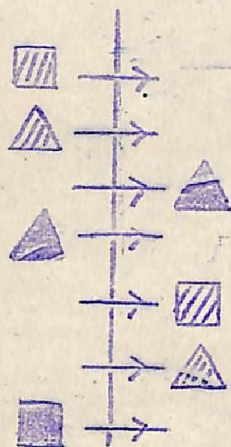
Formas : \triangle \square

entrada $\xrightarrow{\text{CF}}$ saída



Cores: amarelo $\parallel\parallel$
azul —

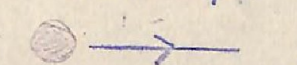
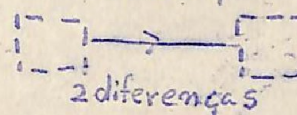
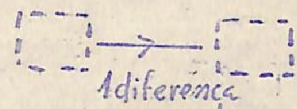
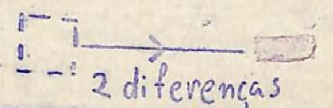
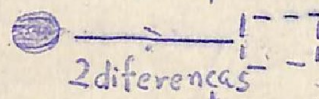
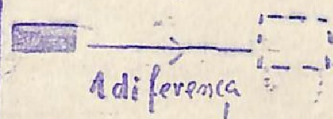
entrada $\xrightarrow{\text{C}}$ saída



Usaremos:

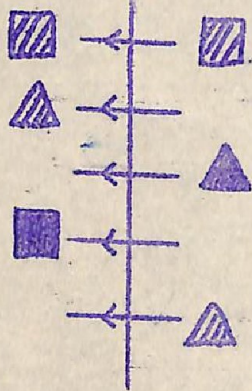
Formas : \square \circ

Cores: vermelho
azul

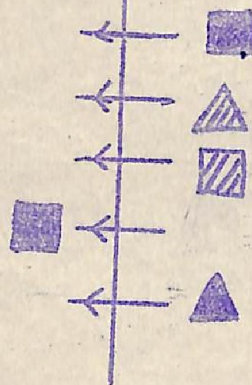


Completa o quadro

saída $\xleftarrow{\text{N}}$ entrada

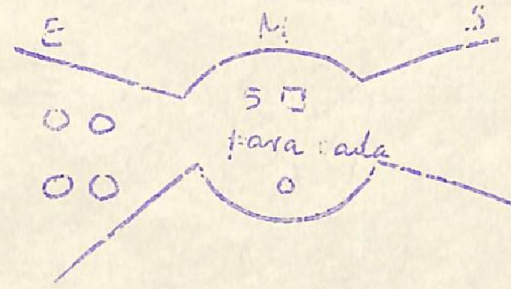
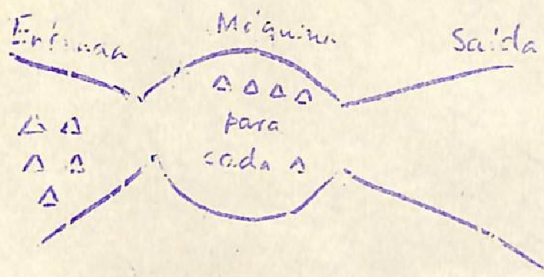


saída $\xleftarrow{\text{F}}$ entrada

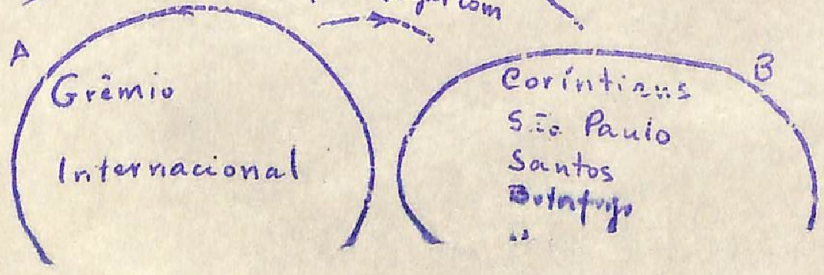
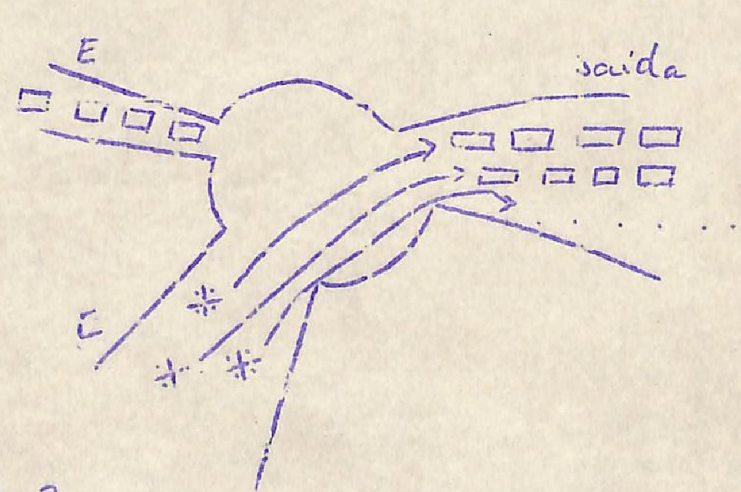
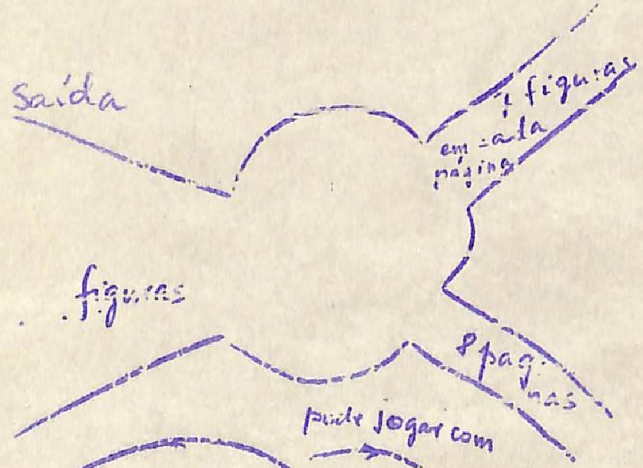
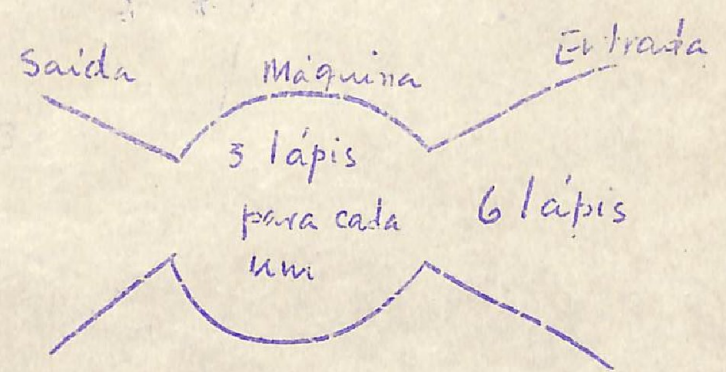
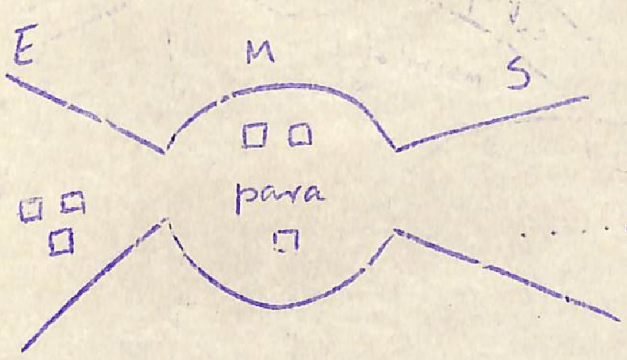
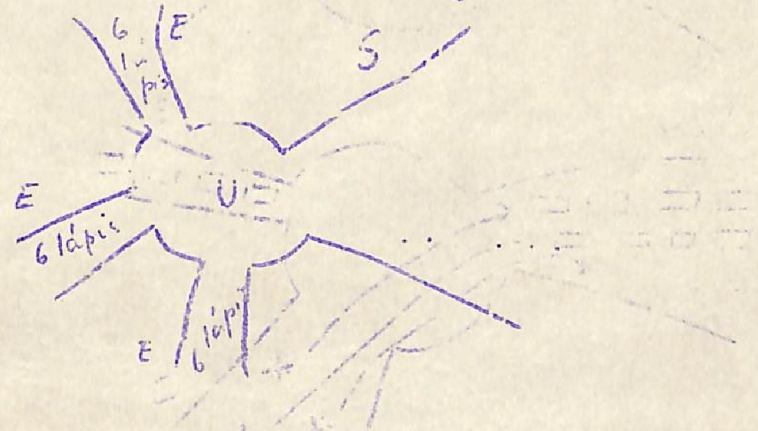
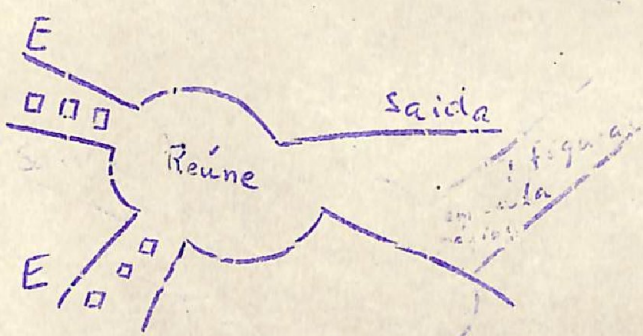


	\triangle	\circ	\square	\square
azul			\square	
vermelho	\triangle	\circ		
amarelo				
verde		\circ		
laranja				\square

Vamos trabalhar em máquinas. Completa o que falta.



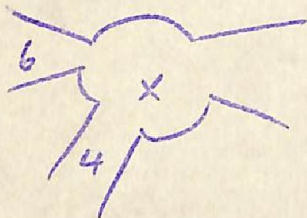
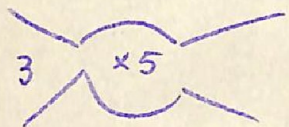
{ 4 meninos } — 3 carrinhos-miniatura para cada um —> { Quantos carrinhos? carrinhos }



Quantos elementos em A? ...
Quantos elementos em B? ...
Quantos elementos em A e B?



Transforma máquinas de números em máquinas de conjuntos:



Faça os esquemas dos conjuntos com os números das multiplicações

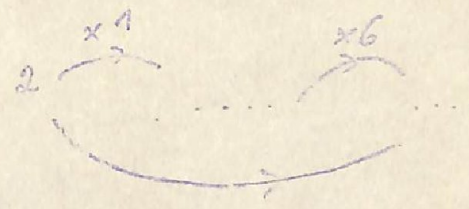
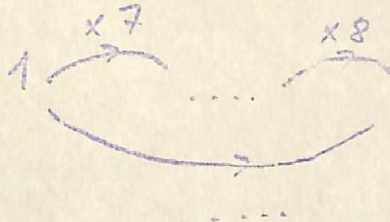


1×2

2×6

5×3

Procura a máquina que sórinha faz o trabalho de cada duas. Completa os números que faltam.

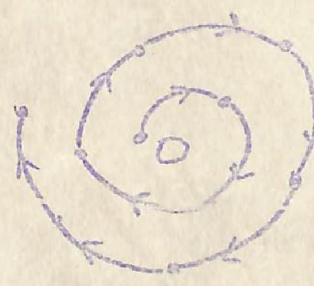
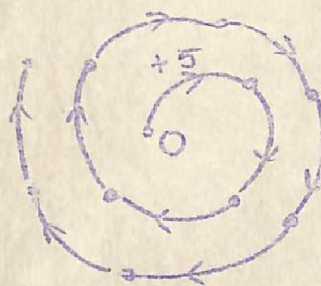


Preenche os pontos da espiral sabendo que as flechas significam

$\xrightarrow{+5}$

$\xrightarrow{+8}$

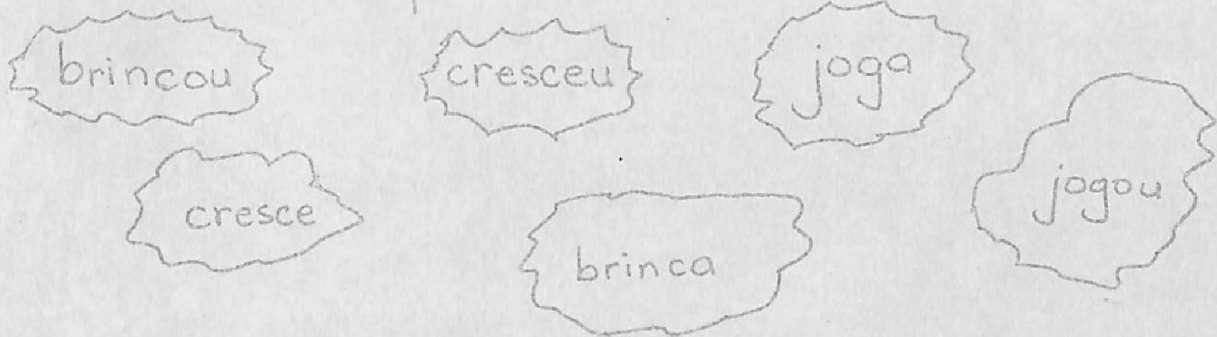
$\xrightarrow{+6}$



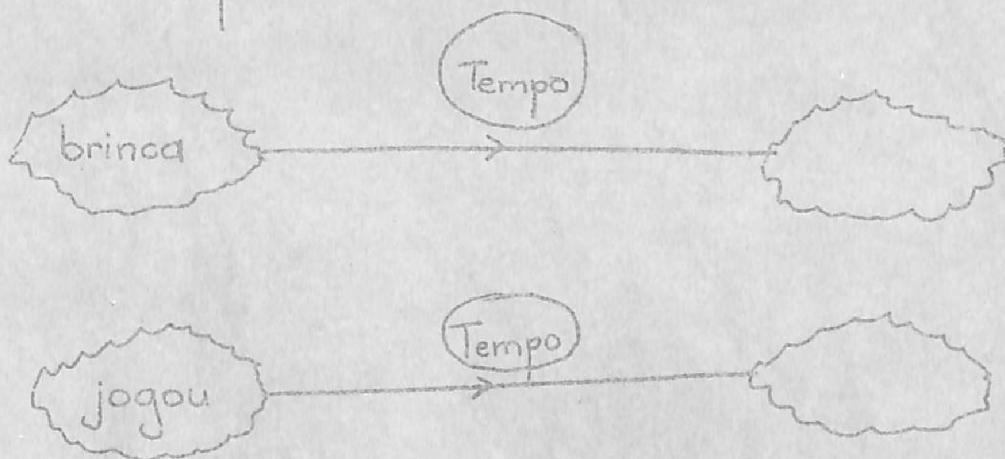
Vamos trabalhar com palavras:

A nossa máquina muda o Tempo:
ontem ou hoje:

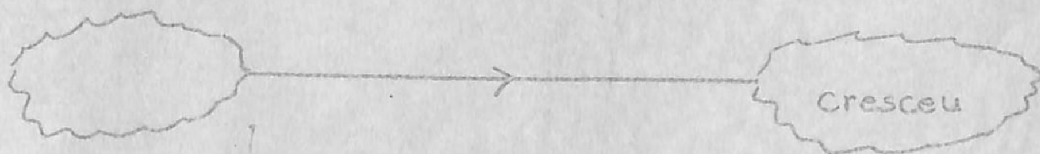
Palavras que vamos usar:



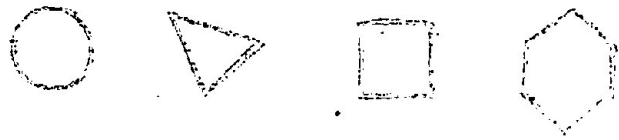
Completa:



Descobre: a entrada:



Inventa uma frase com cada uma das
entradas das máquinas:



Vê duas côns:

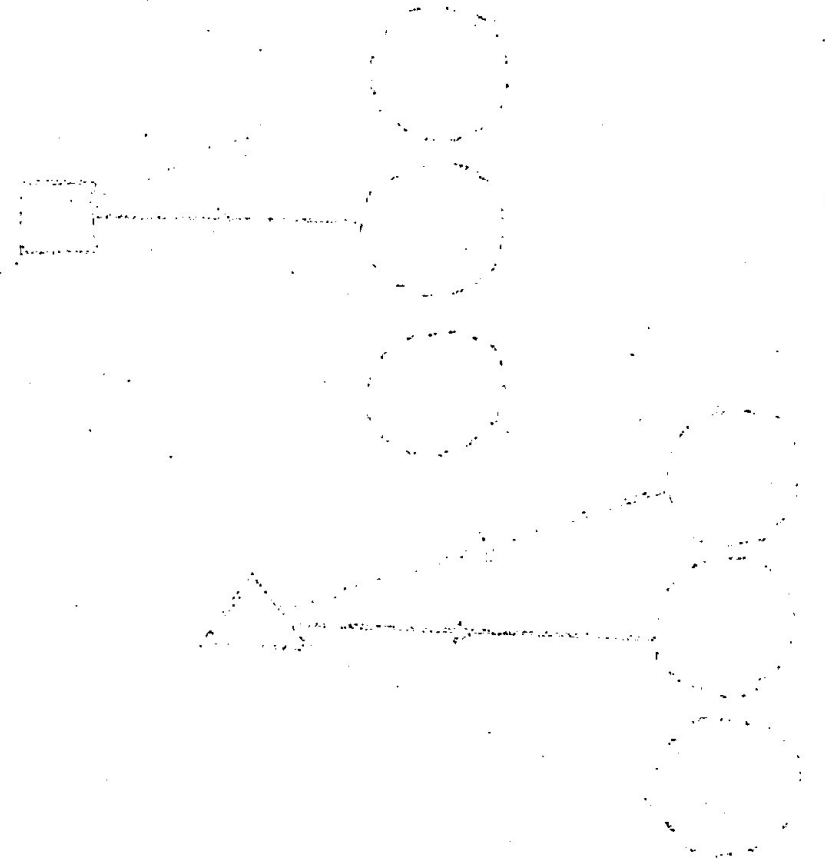
Desenha o mais possível de objetos fabricados utilizando estas 4 formas e estas duas côns.

Cada objeto deve ser colorido de uma cor somente!

É colorido de vermelho

É colorido de azul

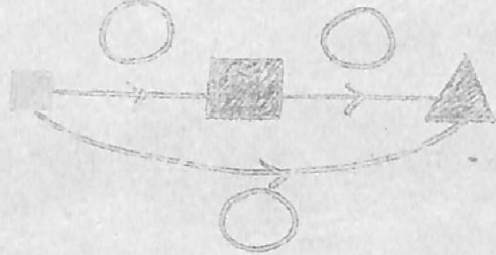
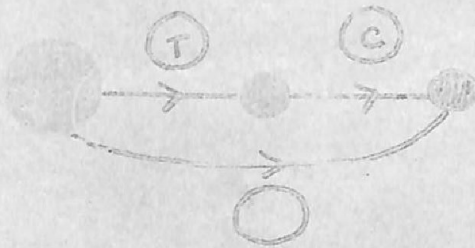
É colorido de verde



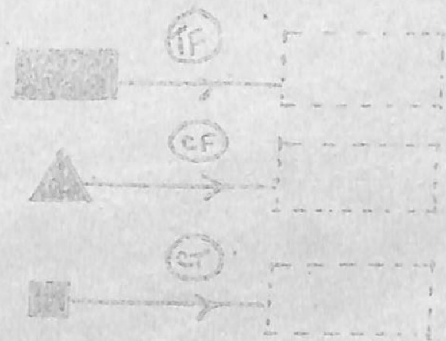
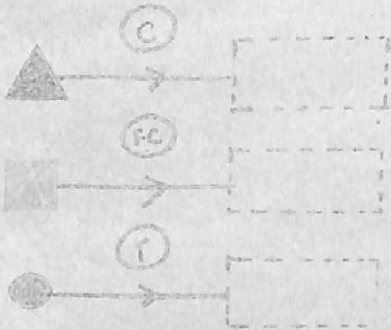
Nome:

Data:

Qual a máquina que faz o trabalho sozinho?



Descobre as saídas:




Desenha o bloco que entrou:

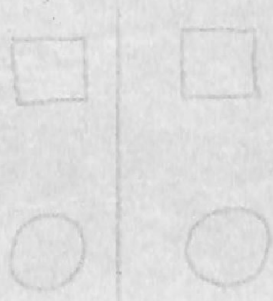
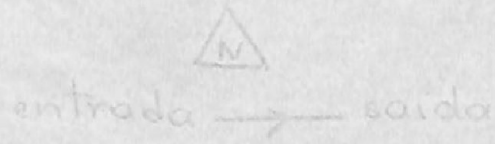
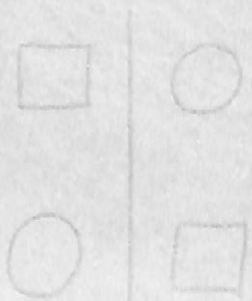
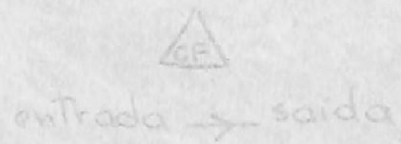
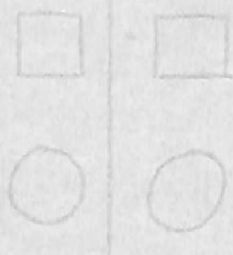
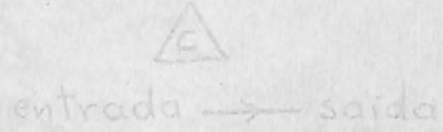
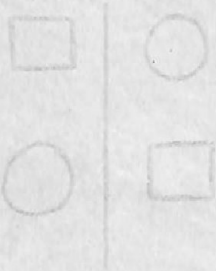
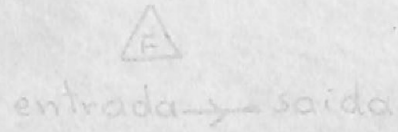


Nome:

Data:

Máquinas:

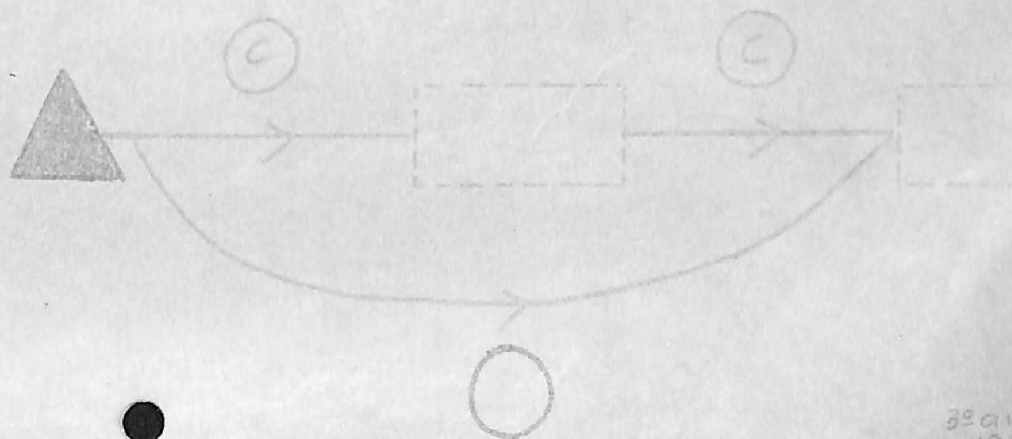
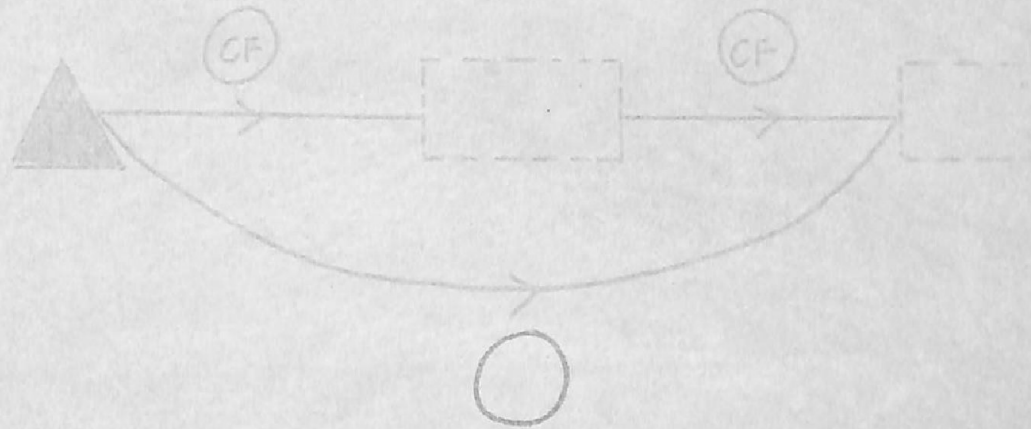
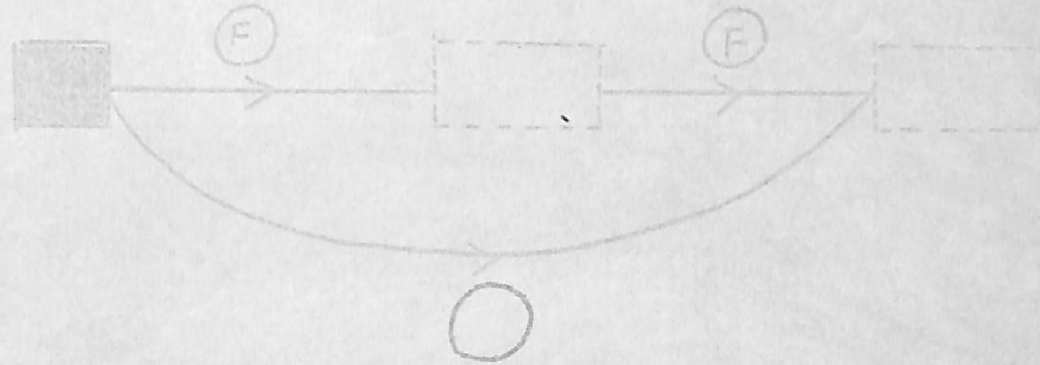
Objetos: ○ □	Côres:  
Máquinas que transformam estes objetos:	
△ E △ C △ M △ F	F = Forma CF = Cor e forma C = Cor M = Nada



Nome:

Data:

Que faz a máquina ○





2

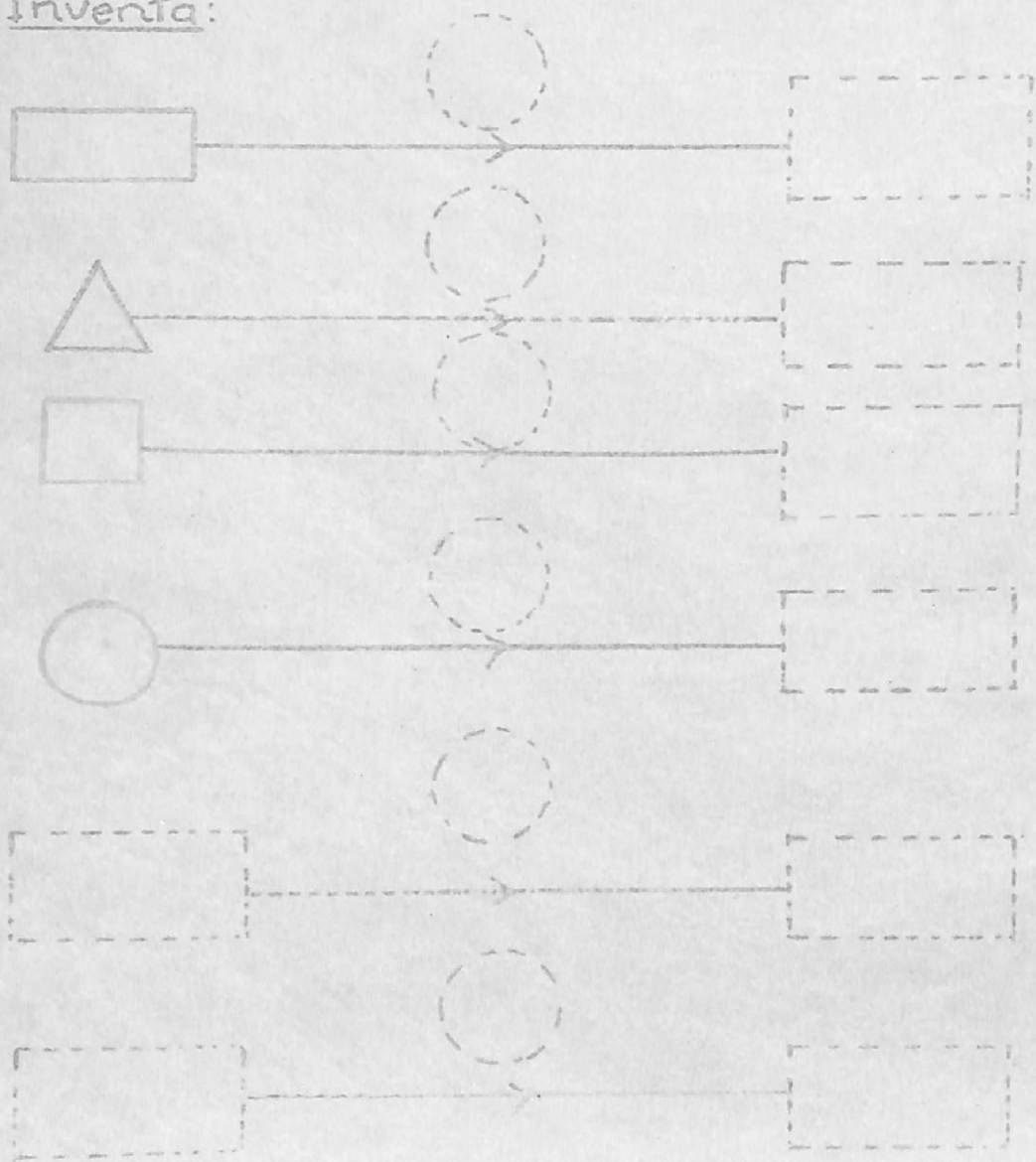
Nada



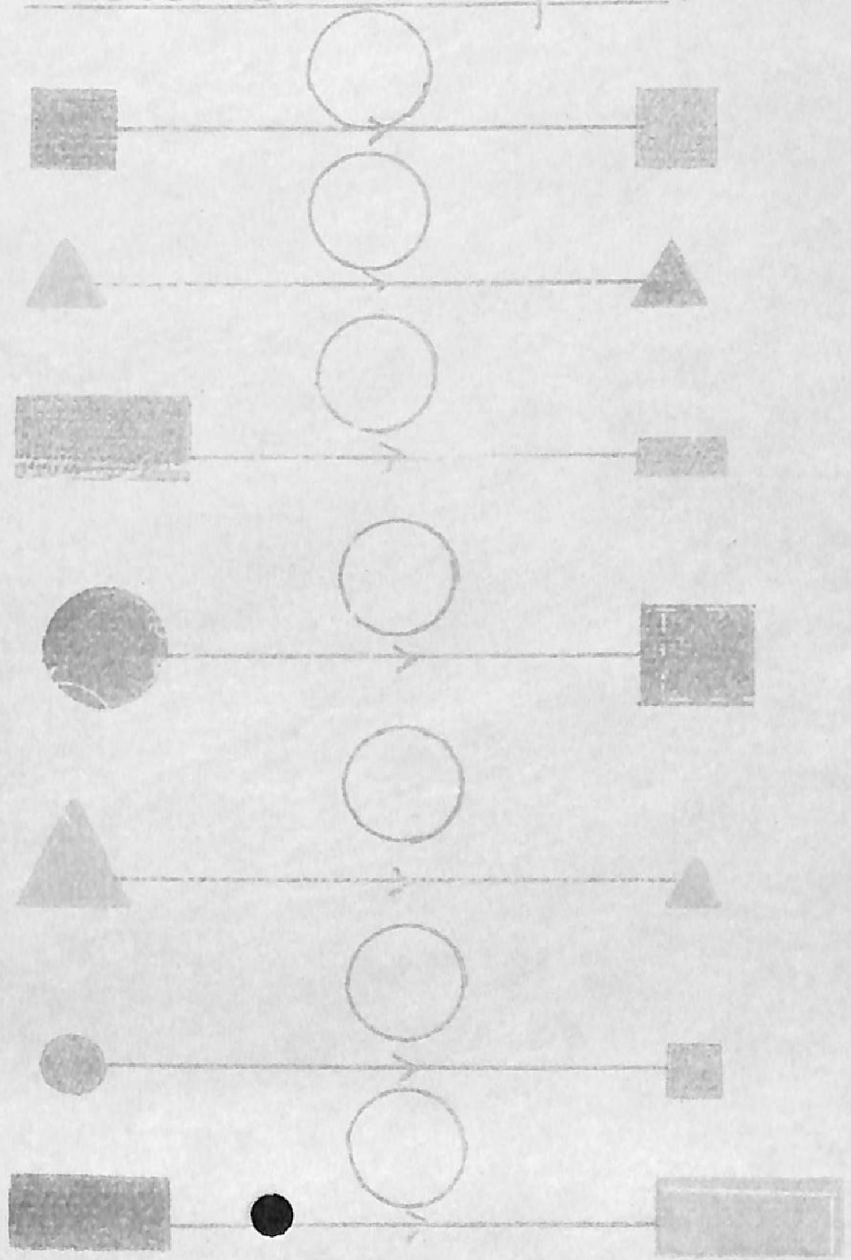
Nome:

Data:

Inventa:




Descobre as máquinas:

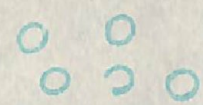
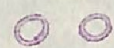


maquinas vão juntar!


Junta




Junta



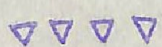
Junta




Junta



Junta

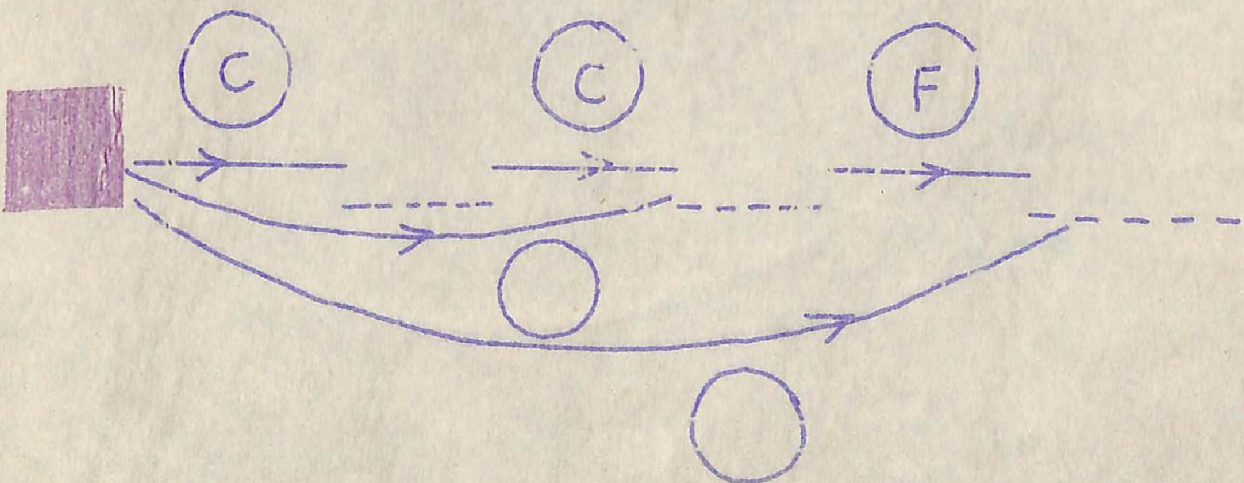
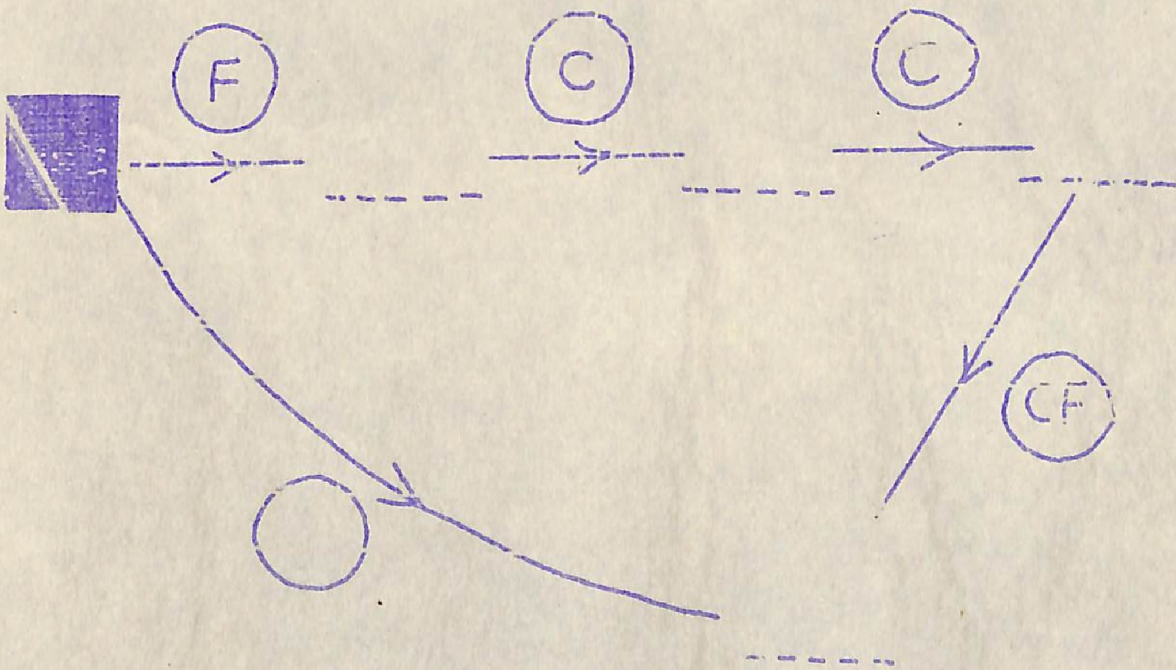
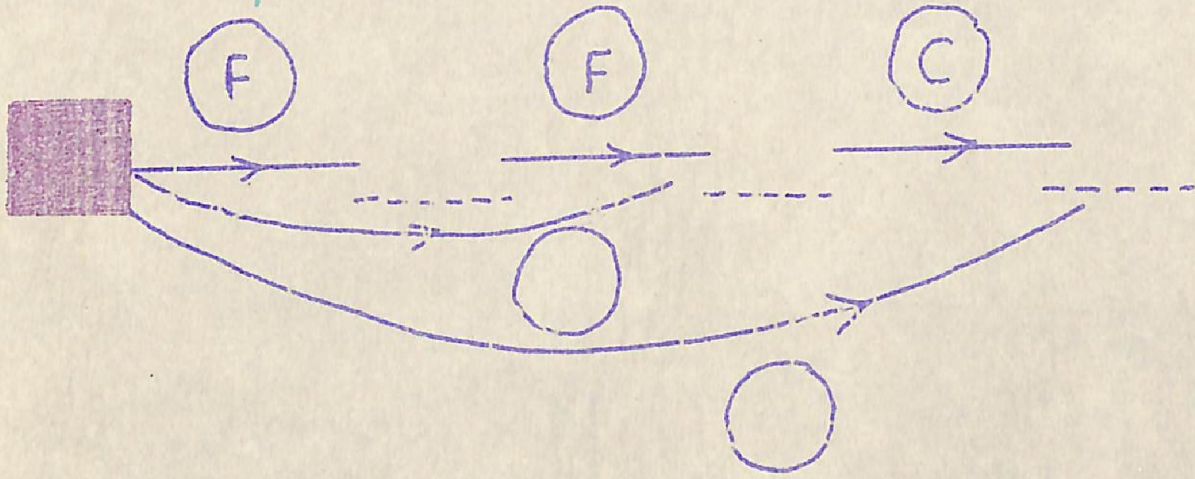


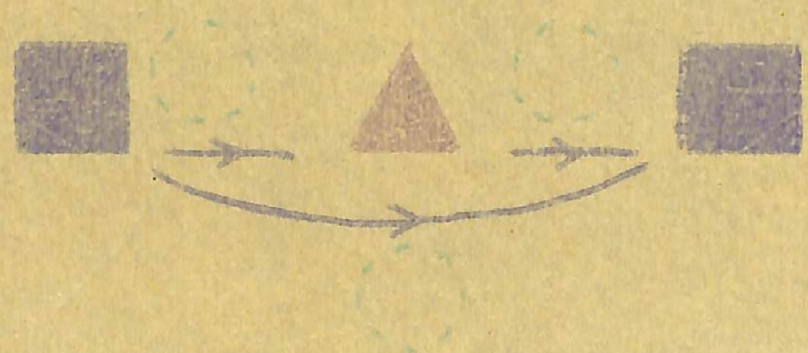
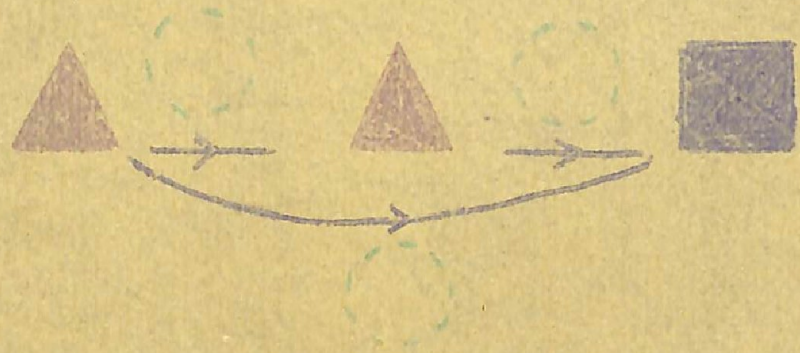
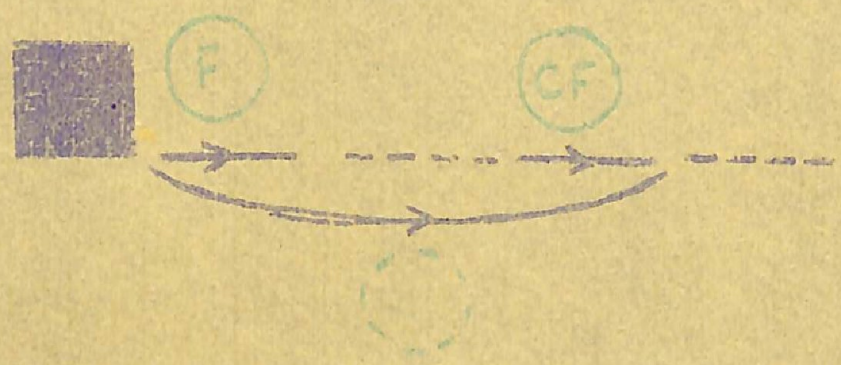
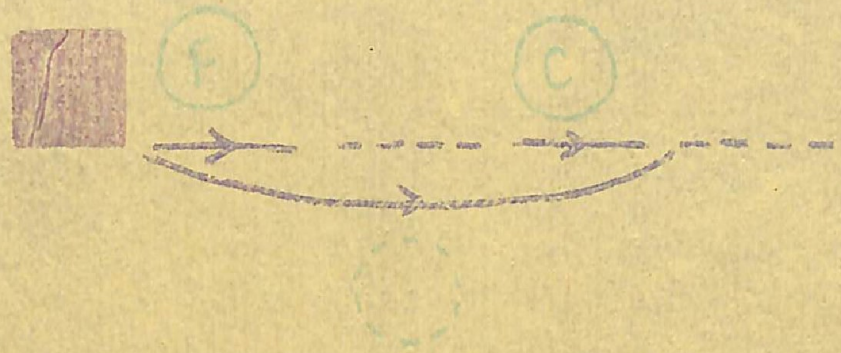
Junta



Instituto de Educação Gen. Flores da Cunha.
1º semestre de 1971.

As máquinas vão funcionar. Atenção!





Nome: _____ Data: _____

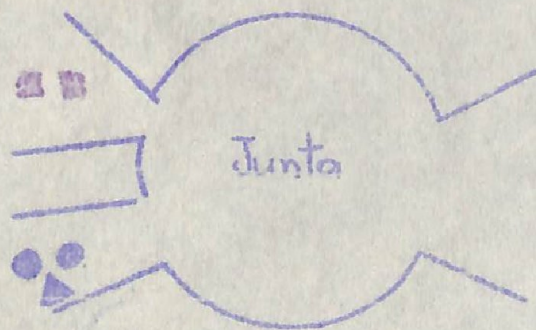
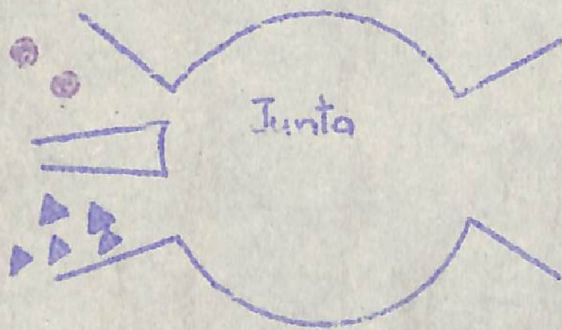
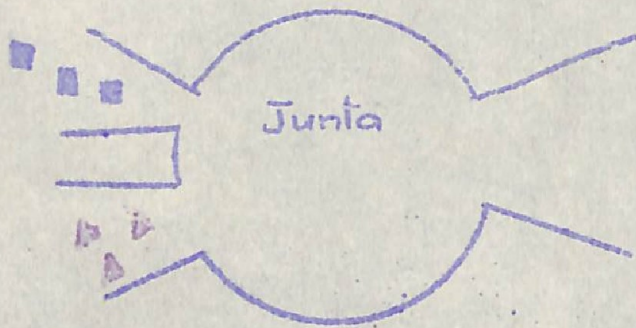
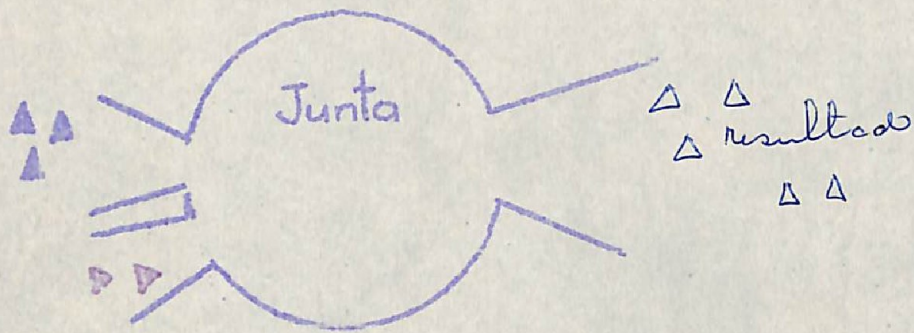
1.ª Gen. Flores da Cunha

25 ano

Dia de abril de 1941

Meu nome é

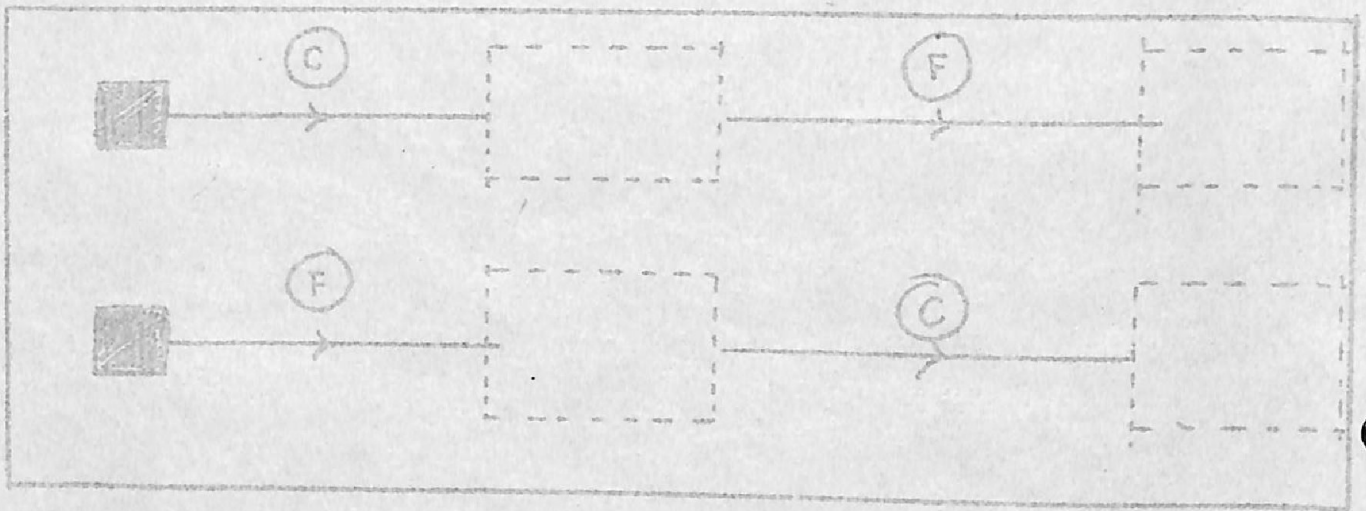
Aí vem mais máquinas. Atenção!



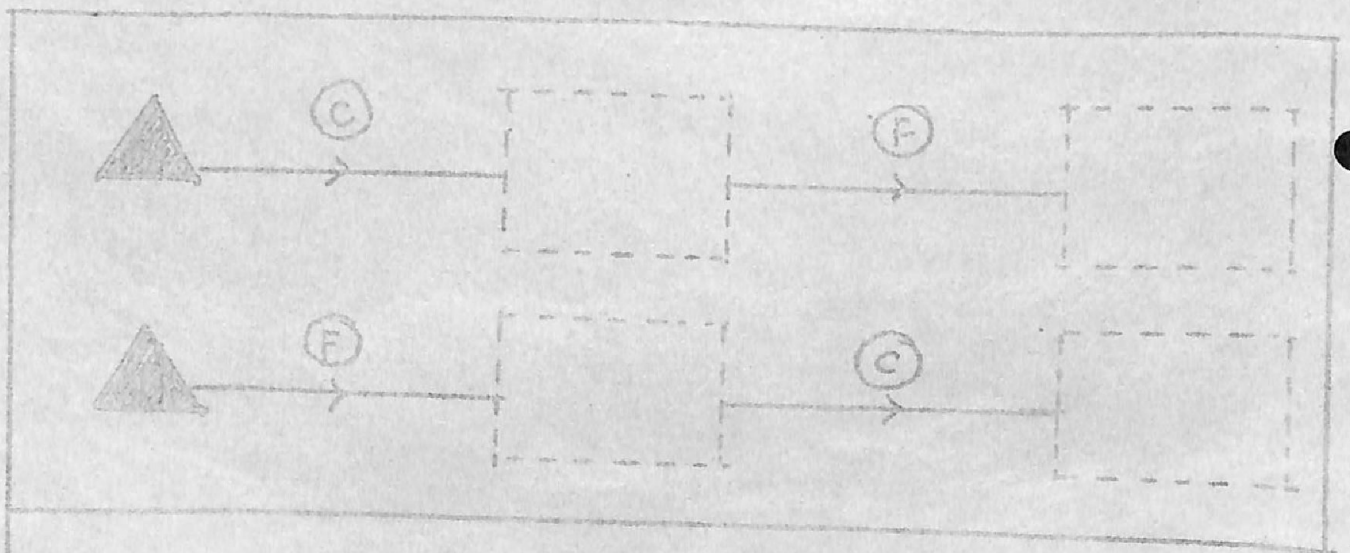
Usaremos:

Formas: triângulos
quadrados

Cores: azul
vermelho



acima? que observaste em relação às máquinas

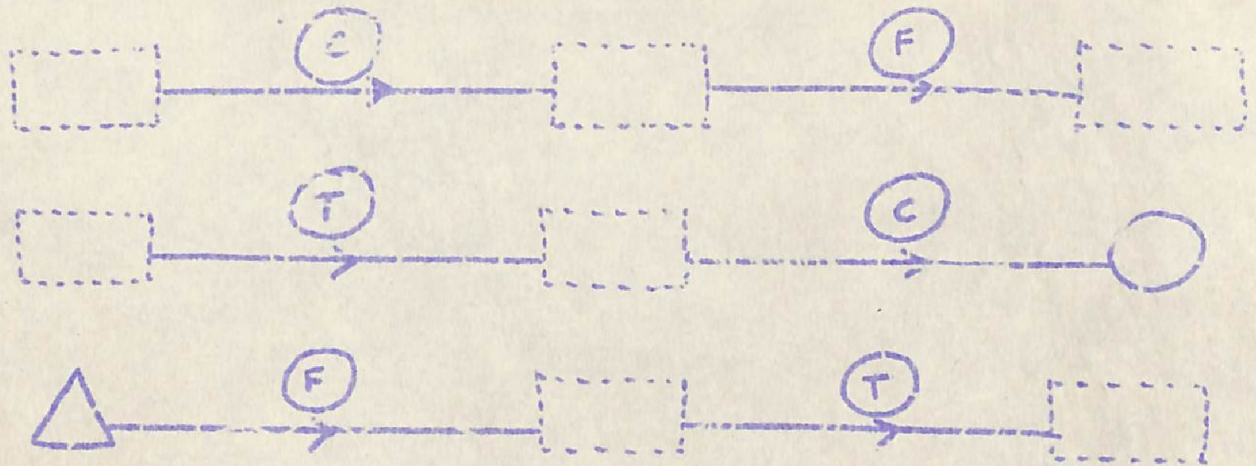


E agora, o que observaste?

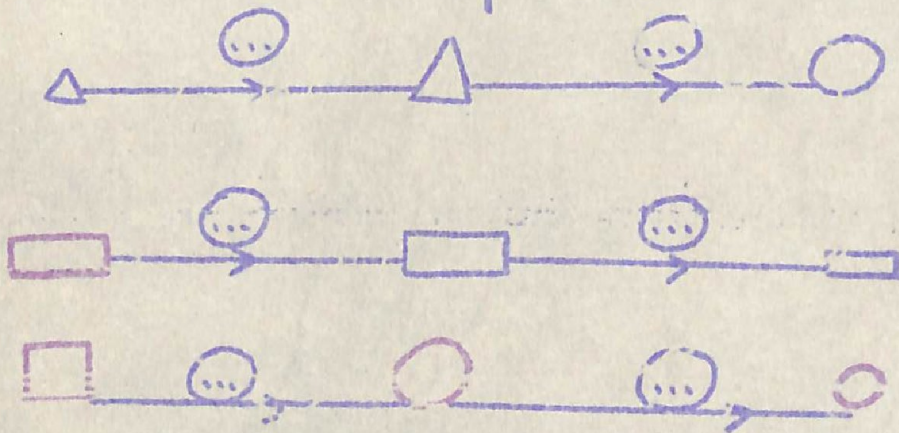
Nome:

Data:

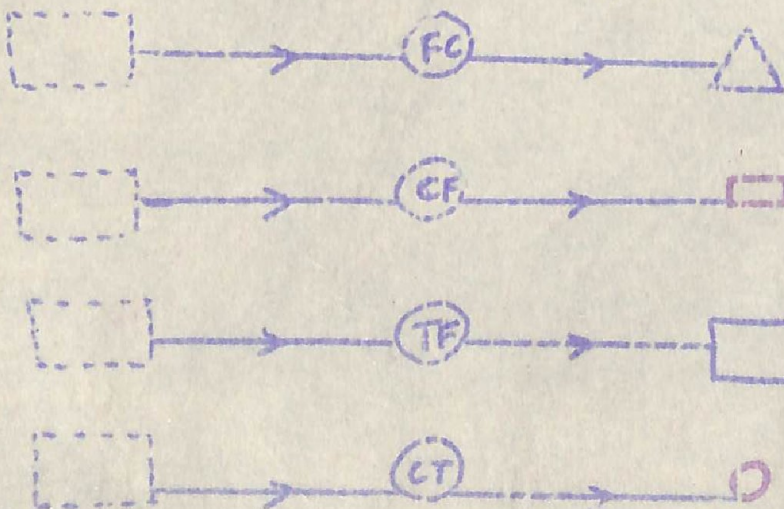
A) Desenha os blocos:



B) Qual a máquina?



c) Desenha o bloco que entrou:



ptm

Símbolos:

C

↓
Cór

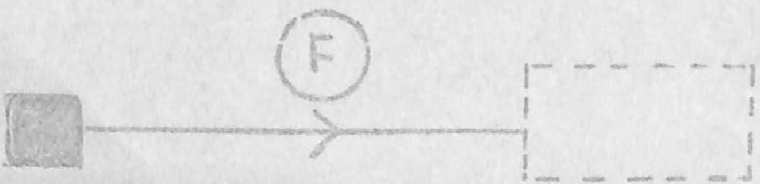
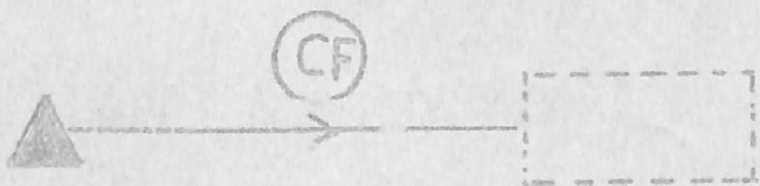
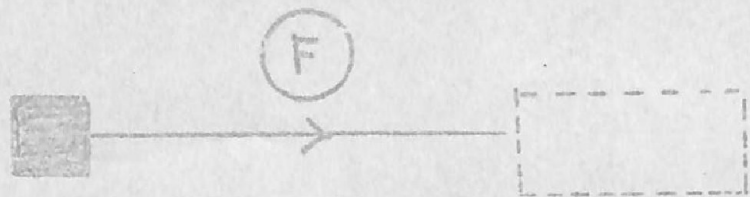
F

↓
Forma

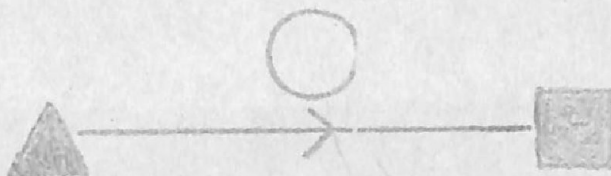
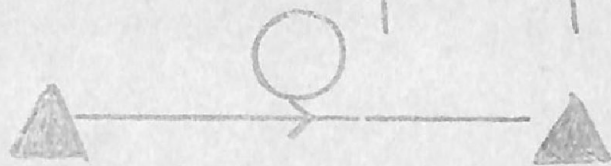
E

↓
Espessura

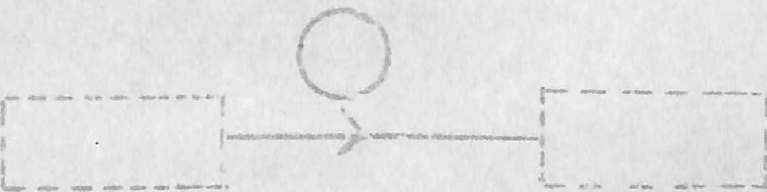
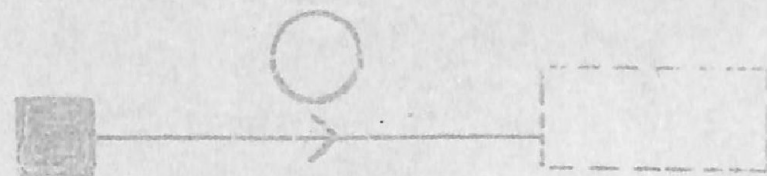
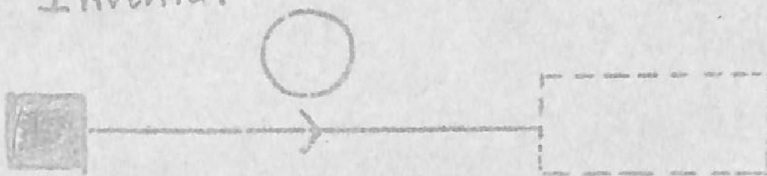
Desenha os blocos que mudaram:



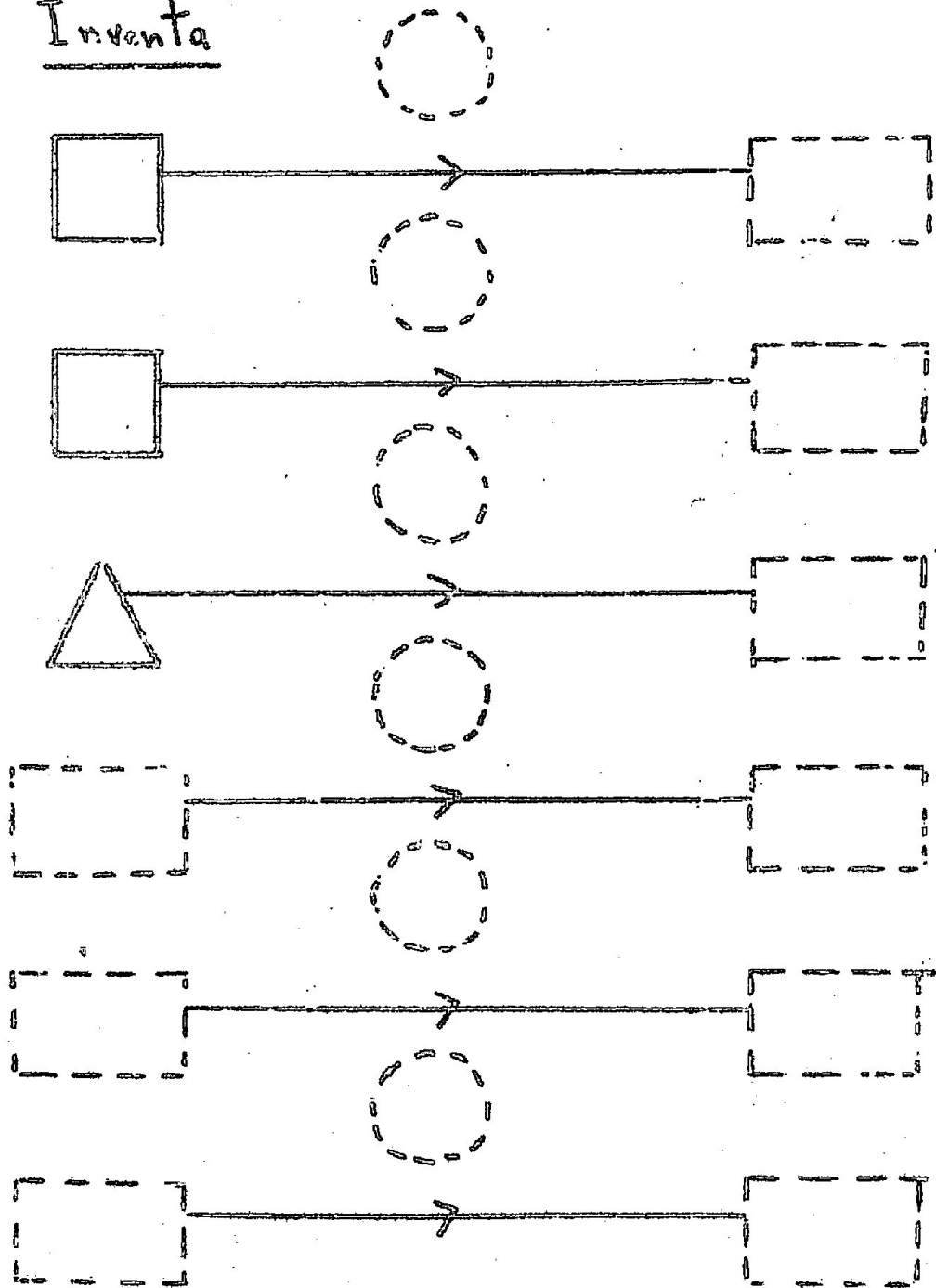
Põe a máquina que convém:



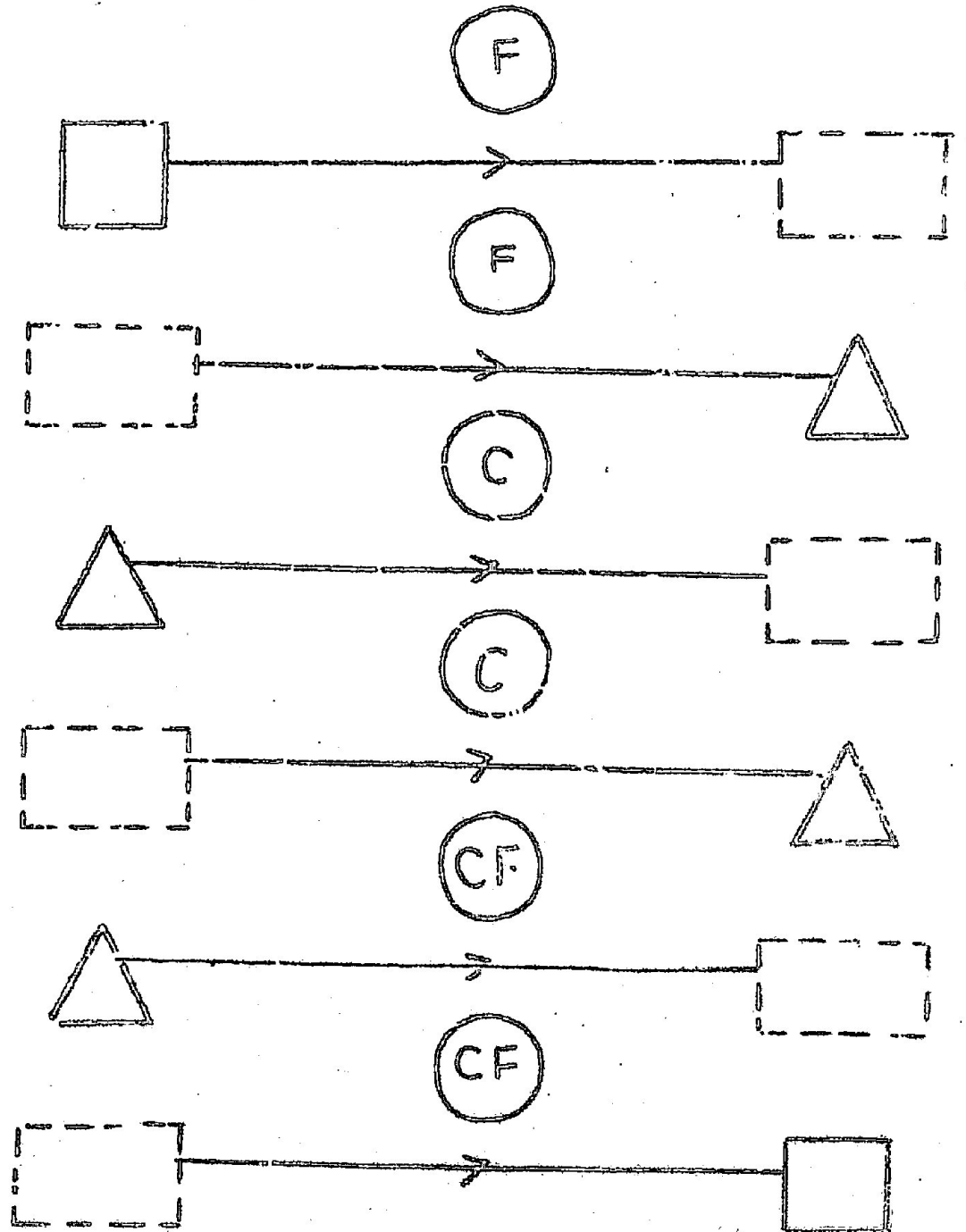
Inventa:



Inventa



Completa:



Eis um conjunto de palavras.

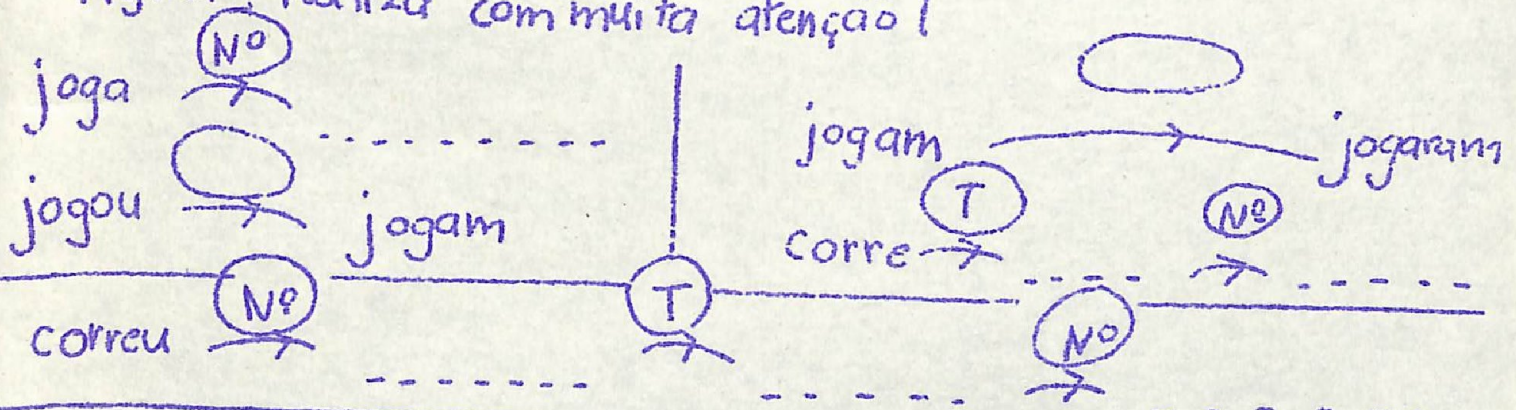
Ele tem palavras de dois verbos: jogar e correr.

Você sabe em que pessoas e em que tempos eles estão conjugados?

{ joga - jogam, - jogou - jogaram, corre - correm, correu }
correram

Número	Tempo
Sing → Plur. Plur. → Sing	Presente → Pretérito Pretérito → Presente

Agora realiza com muita atenção!



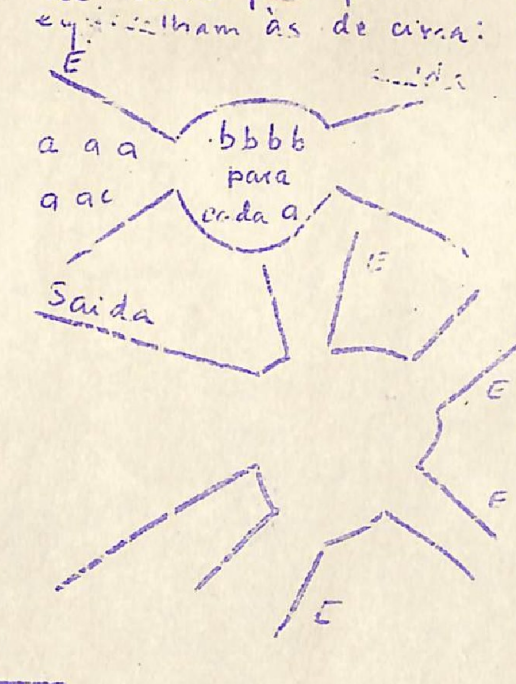
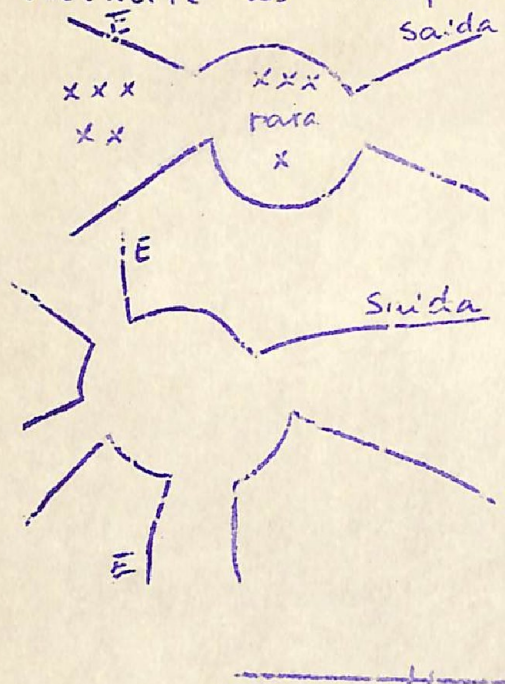
Inventa outras cadeias com essas cadeias:

- ①
- ②

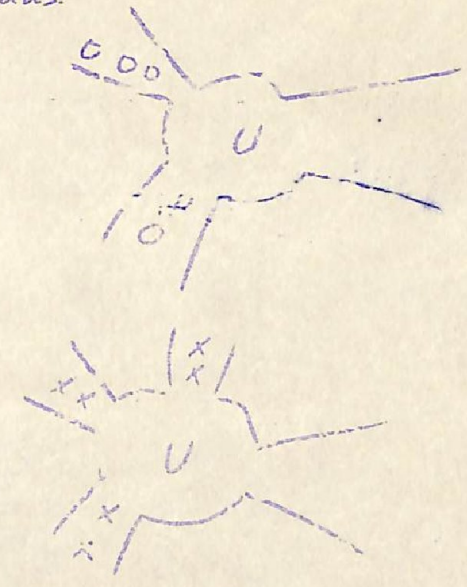
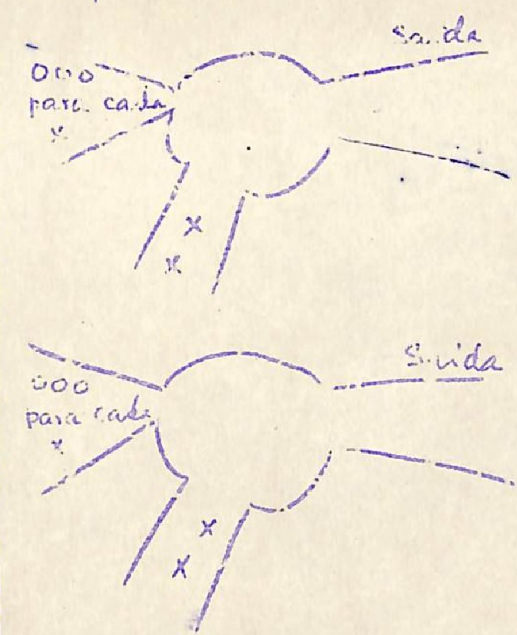
Constrói uma cadeia com essas máquinas que passa ser substituída por uma máquina que não faz nada.

--

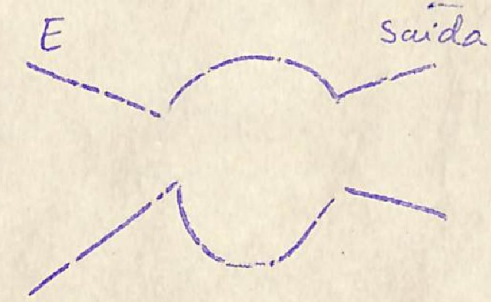
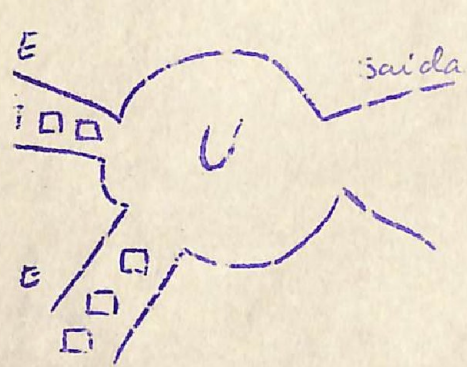
Com paração de máquinas.
 Preenche as máquinas de baixo para cima que elas se relacionam às de cima:



Verdadeira ou falsa, as equivalências entre as máquinas? Complete as saídas.



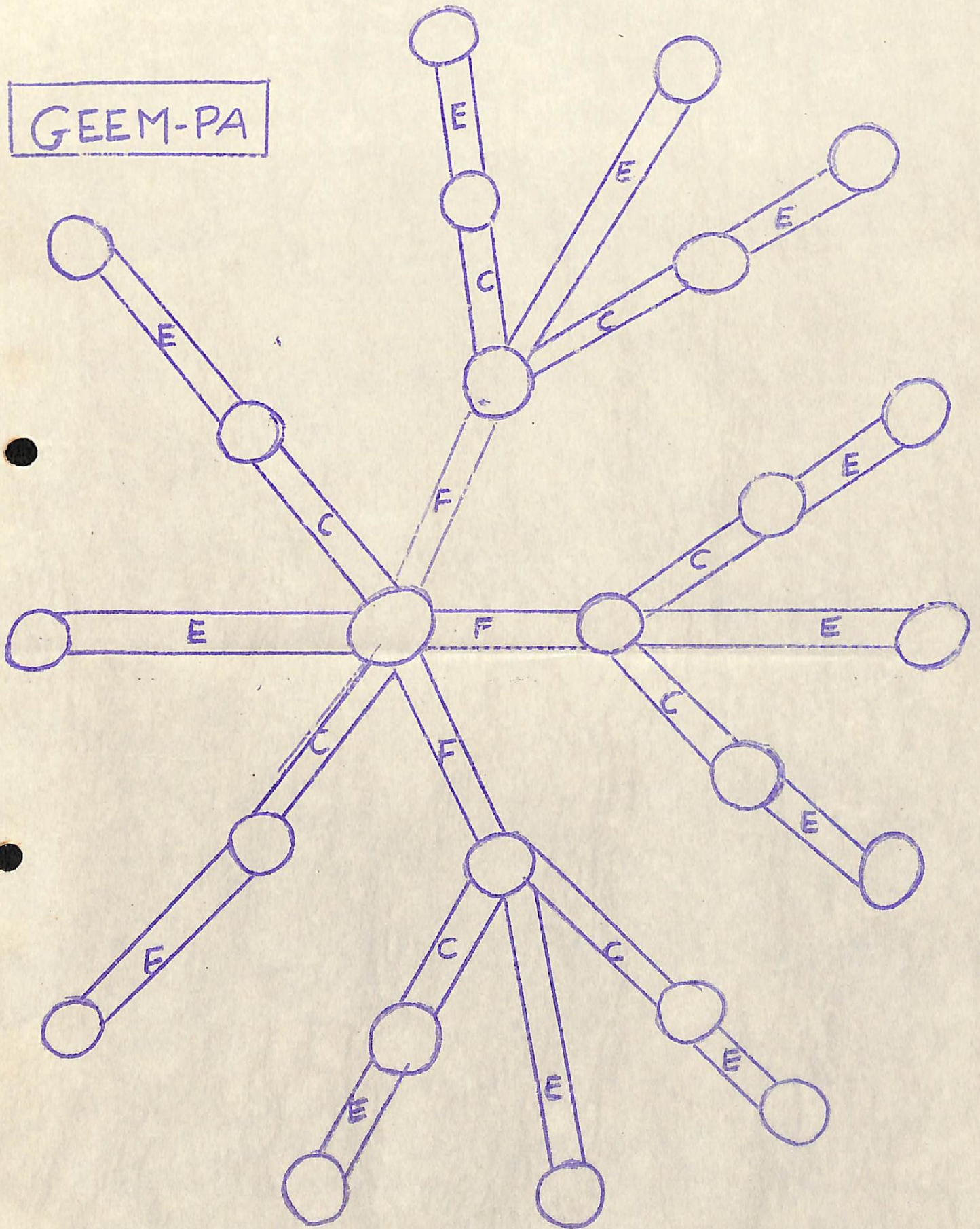
Transforma esta máquina em uma máquina com uma só entrada



	azul	amarelo	vermelho
△			
□			
▭			
○			

A flecha significa
 aponta de
 →
 Passa esta relação
 para uma máquina

GEEM-PA



Pegar os blocos pequenos e colocá-los nos devidos lugares de acôrdo com as máquinhas

(F) → Forma (C) → cor (E) → espessura