

$$f(*p_1, p_2) \in$$

$$*p_1 = 2 * p_2$$

3

$$a = 5 \quad b = 6$$

$$\text{int } t[2] = \{3, 4\}$$

$$\text{int } *p = \text{NULL}, *q = \text{NULL}$$

$$f(*a, b) = 2 * 6 \quad a = 12$$

$$a = 12 \quad b = 6$$

$$1) 12, 6$$

$$p = *a \quad q = *b$$

$$f(q, *p) = *q = 12 * 2$$

$$2) 12, 24$$

$$a = 12 \quad b = 24$$

$$f(4, 3)$$

$$4 = 3 * 2$$

$$3) 3, 6$$

$$4) 48, 24$$

12				32			
p	p	p	p	p		p	
a	a	a	a	a	a	a	a
b	b	b	b	b			b
a	x	b	b	a	x	b	b
c	x	x	x	c	x	x	x
p	p	p	p	p			p

### Question 1 (5 points)

Soient les déclarations suivantes :

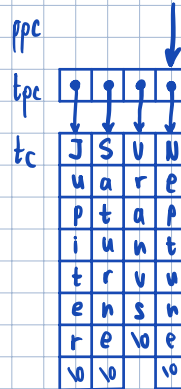
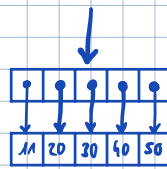
```
int t[] = {10, 20, 30, 40, 50};  
int* tp[] = {t, t+1, t+2, t+3, t+4};  
int** pp = tp + 3;
```

```
const char* tc[] = {"Jupiter", "Saturne", "Uranus", "Neptune"};  
const char** tpc[] = {tc, tc+1, tc+2, tc+3};  
const char*** ppc = &tpc[2];
```

Quelle valeur fournit chacune des expressions ci-dessous ?

(Conseil : Aidez-vous d'un petit dessin)

- 1)  $tp[3][-1] = 30$  ✓
- 2)  $**tp[+++t] = 10 + 11 = 21$  ✓
- 3)  $+++pp-- = 40 \times 41$
- 4)  $(--*pp)[-1] = 11$  ✓
- 5)  $*--pp-(tp+3) = -2$  ✓
- 6)  $***tpc = 'U' \times 'J'$
- 7)  $+++tc[3] = 'r' \times 'e'$
- 8)  $+++ppc = \text{"Neptune"} \text{ "eptune"}$
- 9)  $*--*(tpc+1)+3 = \text{"Saturne"} \text{ "iter"}$
- 10)  $+++ppc[0][-2] = 'a'$  ✓

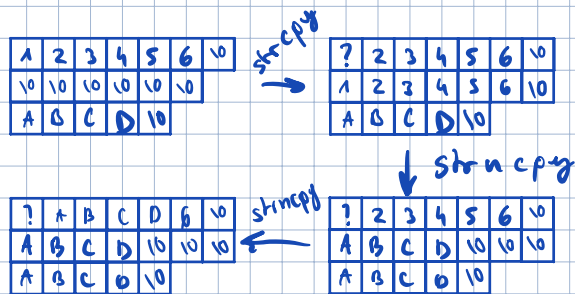


b) (2 pts)

Que va afficher à l'exécution le programme C ci-dessous ?

```
#include <stdio.h>
#include <stdlib.h>
#include <string.h>
```

```
int main(void) {
    char chaine1[] = "123456";
    char chaine2[6];
    const char* chaine3 = "ABCD";
    strcpy(chaine2, chaine1);
    strncpy(chaine2, chaine3, strlen(chaine2));
    printf("%s\n", strncpy(chaine1 + 1, chaine3, strlen(chaine2)));
    return EXIT_SUCCESS;
}
```



chaine 2    1 2 3 4 5 6 \0

chaine 1    ? 2 3 4 5 6 \0